

SCENERY TO WILDERNESS

National Park Development in Tasmania, 1916-1992

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Declaration

This thesis contains no material that has been accepted for the award of any other degree or diploma in any tertiary institution and, to the best of my knowledge and belief, the thesis contains no material previously published or written by another person, except where due reference is made in the text.

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ABSTRACT

National parks comprise a significant component of landscapes around the world. This thesis examines the development of the national park system in Tasmania from 1916 to 1992, with a particular emphasis on changing conservation motives and themes, and their expression in the reserve system.

Part One of this thesis traces the creation of national parks in Tasmania over three major periods of reservation activity: the early period (1916-1937); the middle period (1938-1970); and the late period (1971-1992). Historical evidence is used to identify: the reserve proponents and their motives; opposition to establishing reserves; the debates surrounding the creation of reserves; and the outcomes. A developmental narrative is given on the creation of national parks in each period, with a broader view of identifying the dominant conservation motives and themes and changes to these over time.

Part Two of this thesis examines the representation of three major conservation attributes in national parks established across each period of reserve development. The representation of biological diversity, scenery and wilderness in national parks is quantified for each period. The changing levels of representation of each of these attributes and their relative significance to each other over time are assessed.

The historical and mapping analyses both indicate that there have been shifting emphases in conservation motives and themes over time in the development of Tasmanian national parks. In both the early and middle periods the historical evidence suggests that scenery and general nature conservation were the dominant motives behind the creation of national parks, together with themes of tourism and recreation. In the late period there was a shift in emphasis towards wilderness conservation and more specific nature conservation as the dominant themes. Areas of high aesthetic value had greater proportionate representation in national parks during the early and middle periods than the late period. While national parks were established in wilderness areas during all periods, the representation of wilderness in

the reserve system increased dramatically during the late period. The representation of biological diversity was biased towards high altitude biological elements in the early and middle periods, and expanded to capture greater diversity during the late period.

There is thus a strong relationship between motives and patterns of elements captured in the reserve system. However, this has been tempered by opposition from those with economic interests in the State's natural resources, particularly the mining, forestry and hydro-electric industries.

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CONTENTS

Abstract i

Acknowledgments iii

Figures viii

Plates x

Tables xi

Abbreviations xiii

CHAPTER 1: Introduction 1

National Parks 1

Emergence, expansion and roles 1

Motives behind national park creation 4

The Tasmanian situation 6

Thesis Aims and Structure 7

Endnotes 9

**PART 1: The Creation of National Parks in
Tasmania, 1916-1992: Motives, Proposals,
Debates and Outcomes** 14

**CHAPTER 2: Scenes of Unsurpassed Grandeur
(The Early Period: 1916-1937)** 15

Background 15

National Park Proposals 20

The Freycinet Peninsula 20

Mt Field 26

Cradle Mountain 37

Reserve Extensions 48

Discussion 51

Endnotes 56

CHAPTER 3: Roads, Hounds and Dams

(The Middle Period: 1938-1970)	62
Expansion of the Reserve System	62
Hartz Mountains	62
Roadside and Riparian Reserves	65
Mt Barrow	67
Frenchmans Cap	69
Ben Lomond	71
Lake Pedder and the South-West	76
Rocky Cape	89
Reserve Revocations	93
Cradle Mountain - Lake St Clair	94
Hartz Mountains	96
Mt Field	98
Discussion	104
Endnotes	112

CHAPTER 4: The Charge of the Green Brigade

(The Late Period: 1971-1992)	117
Growth and Conflict	117
Maria Island	117
Mt William	125
Asbestos Range	133
South-West Tasmania and the Wilderness World Heritage Area ..	143
<i>Lake Pedder</i>	143
<i>The South-West:</i>	147
<i>First phase of expansion</i>	147
<i>Second phase of expansion - wild rivers</i>	160
<i>Third phase of expansion - tall trees</i>	169
Walls of Jerusalem	179
Douglas-Apsley	185
Discussion	190
Endnotes	200

PART 2: The Representation of Biodiversity, Scenery and Wilderness in Tasmanian

National Parks, 1916-1992	212
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CHAPTER 5: Biodiversity	213
Introduction	213
Methods	215
Results	221
The representation of forest communities in reserves	221
The representation of vegetation types in reserves	227
Proportional representation of vegetation types in reserves	232
Discussion	236
Endnotes	239
 CHAPTER 6: Scenery	 241
Introduction	241
Pictorial Content Analysis	243
Introduction	243
Methods	243
Results	245
Scenic Attributes and Scenic Evaluation	254
Introduction	254
Methods	254
Scenic Analysis Trials	256
Results	258
<i>Scenic attribute data and scenic scores</i>	258
<i>Scenic analysis across three historic periods</i>	262
<i>Large reserves versus small reserves</i>	263
Discussion	268
Endnotes	272
 CHAPTER 7: Wilderness	 276
Introduction	276
Methods	277
Results	280
Historic statewide extents of wilderness, 1916-1992	280
Representation of wilderness in reserves, 1916-1992	286
Discussion	288
Endnotes	290

CHAPTER 8: Conclusion	292
National Parks in Tasmania	292
Changing motives and conservation themes	292
The expression of motives in the reserve system	294
Opposition to national parks and its impacts	295
Oddities and novelties	298
Concluding Remarks	300
Endnotes	302
 BIBLIOGRAPHY	 305
Archives Office of Tasmania	305
Records Office, Department of Primary Industry, Water and the Environment	305
Newspapers	305
Interviews	306
Parliamentary Acts, Bills and Papers (Tasmanian)	306
Parliamentary Acts and Papers (Federal)	307
Theses and unpublished material	308
Maps	310
Brochures and miscellaneous items	311
Published material	314

FIGURES

2.1: Sketch map of Mt Field National Park, 1917	35
2.2: Mt Field National Park c1930	49
2.3: Cradle Mountain - Lake St Clair National Park c1936	50
2.4: National Parks in Tasmania, 1937	53
3.1: Frenchmans Cap National Park	72
3.2: Lake Pedder National Park, showing development of boundaries	78
3.3: The Hydro-Electric Commission's proposed Middle Gordon Power Development Scheme, 1962	81
3.4: The South-West Committee's proposed South-West National Park, 1966	86
3.5: Southwest National Park, 1968	91
3.6: Rocky Cape National Park, 1967	93
3.7: Revocation of the western portion of Mt Field National Park and southerly extension, 1950	103
3.8: National Parks and equivalent large reserves in Tasmania, 1970	107
4.1: Maria Island National Park	124
4.2: Mt William National Park	132
4.3: Asbestos Range National Park	143
4.4: Proposed additions to the Southwest National Park in the draft management plan, 1975	149
4.5: Australian Conservation Foundation's proposed boundary for the Southwest National Park, 1975	155
4.6: The Hydro-Electric Commission's proposed Gordon River Power Development Scheme, Stage Two, 1979	162
4.7: The National Parks and Wildlife Service's proposed Wild Rivers National Park, 1979	164
4.8: Tasmania's World Heritage Area, 1982	172
4.9: Conservation groups' proposed enlarged Western Tasmania National Park (World Heritage Area), 1984	173
4.10: The Lemnathyme and Southern Forests inquiry areas, Helsham Inquiry 1987	174
4.11: Conservation groups' draft nomination for the Western Tasmania World Heritage Area, 1988	178

4.12: The Tasmanian Wilderness World Heritage Area, 1990	180
4.13: Douglas-Apsley National Park	189
4.14: National Parks and equivalent large reserves in Tasmania, 1992	194
5.1: Percentage representation of vegetation types in reserves, 1937, in relation to pre-European estimated statewide areas	231
5.2: Percentage representation of vegetation types in reserves, 1970, in relation to pre-European estimated statewide areas	232
5.3: Percentage representation of vegetation types in reserves, 1992, in relation to pre-European estimated statewide areas	233
5.4: Percentage areas of total statewide vegetation versus percentage areas reserved, 1937	234
5.5: Percentage areas of total statewide vegetation versus percentage areas reserved, 1970	235
5.6: Percentage areas of total statewide vegetation versus percentage areas reserved, 1992	236
6.1: Natural scenic value in Tasmania	261
6.2: Relative scenic value of national parks and equivalent reserves established from 1916-1992	264
6.3: Relative scenic value of large and small reserves created between 1916 and 1937	266
6.4: Relative scenic value of large and small reserves created between 1938 and 1970	267
6.5: Relative scenic value of large and small reserves created between 1971 and 1992	269
7.1: Statewide extent of wilderness, 1916	282
7.2: Statewide extent of wilderness and reserve boundaries, 1937 . .	283
7.3: Statewide extent of wilderness and reserve boundaries, 1970 . .	284
7.4: Statewide extent of wilderness and reserve boundaries, 1992 . .	285

PLATES

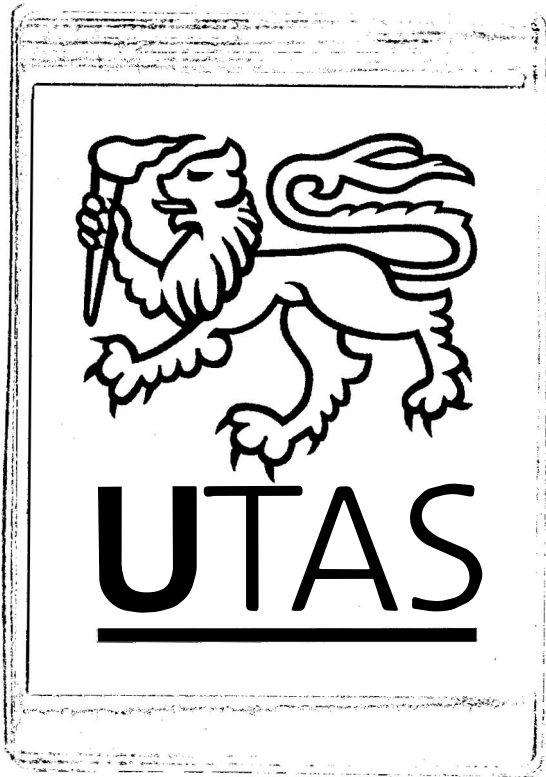
2.1: Gordon River scene	18
2.2: Wineglass Bay, the Freycinet Peninsula	22
2.3: The Tasmanian Field Naturalists Easter camp at Wineglass Bay, Freycinet Peninsula, 1908	23
2.4: Mountain scene, Mt Field area	27
2.5: Leonard Rodway, Government Botanist of Tasmania	28
2.6: The opening of Mt Field National Park, 1917	36
2.7: Gustav Weindorfer of Cradle Mountain	38
2.8: Cradle Mountain and Dove Lake	39
3.1: Hartz Mountain and Lake Emily	63
3.2: Colin Pitt (Surveyor-General), while working as Chief Engineer on the West Coast Road, 1933	66
3.3: The opening of the Mt Barrow Road by Major Davies, Minister for Lands, 13 April 1940	68
3.4: Frenchmans Cap	71
3.5: Skiing party, Mt Field National Park	73
3.6: Members of the Northern Tasmanian Alpine Club at 'Carr Villa' - hut on Ben Lomond, 1937	75
3.7: Lake Pedder from the Frankland Range	77
3.8: Premier 'Electric Eric' Reece	90
3.9: Mt Pelion Company's wolfram mine, 1920	94
4.1: Precipitous Bluff from Prion Beach, south-west Tasmania	151
4.2: In the Great Ravine, Franklin River	163
6.1: Mt Gould and Lake Marion, central Tasmania	246
6.2: Cape Raoul, Tasman Peninsula, southeast Tasmania	247
6.3: Port Davey, west coast	247
6.4: St Columba Falls, South George River, northeast Tasmania ...	248
6.5: Cradle Mountain	249
6.6: Russell Falls, Mt Field National Park	250
6.7: Frenchmans Cap, west coast	251
6.8: Mount Gould and Lake Elysia, the Labyrinth, Du Cane Range, central Tasmania	252
6.9: East face of Cradle Mountain	252
6.10: New Harbour Beach, southwest Tasmania	253

TABLES

2.1: Reserves of natural areas in Tasmania, 1899	25
2.2: National Parks and reserves in Tasmania, 1937.	52
3.1: National Parks and reserves in Tasmania, 1970	104
3.2: Reserve revocations, 1938-1970	110
4.1: National parks and natural area reserves in Tasmania, 1992 ...	190
4.2: Reserve revocations, 1971-1992	198
5.1: Current and pre-European estimated statewide extents of forest communities, with areas lost since European settlement	217
5.2: Current and pre-European statewide extents of vegetation types, with areas lost since European settlement	219
5.3 Current and pre-European areas of vegetation types, expressed as a percentage of total statewide vegetation.	220
5.4: Cumulative representation of forest communities in reserves over three historic periods	222
5.5: Cumulative percentage representation of forest communities in reserves over three historic periods	225
5.6: Cumulative representation of vegetation types in reserves over three historic periods	228
5.7: Cumulative percentage representation of vegetation types in reserves over three historic periods	230
6.1: Representation of natural scenic elements in photographs of natural areas published in three historic periods in Tasmania	245
6.2: Cumulative reservation of scenic attributes over three historic periods, expressed as absolute scores and percentages of the 1992 totals of the Tasmanian natural scenic estate	259
6.3: Mean grid square scores of scenic attributes in national parks and equivalent reserves over three historic periods	259
6.4: Summed scores and mean grid square scores of scenic attributes for reserved and unreserved components of the Tasmanian natural scenic estate, 1992	260
6.5: Proportional increase in the representation of scenic attributes in reserves over time	260
7.1: Statewide extents of wilderness core areas and wilderness loss from pre-European area over major periods of national park development	281

7.2: Wilderness loss over three historic periods 281

7.3: Representation of wilderness core and buffer zone areas in
reserves over three historic periods 287



ABBREVIATIONS

ABPB	Animals and Birds Protection Board
ACE	Association of Consumers of Electricity
ACF	Australian Conservation Foundation
ANM	Australian Newsprint Mills
APM	Australian Paper Manufacturers
APPM	Australian Pulp and Paper Manufacturers
BHP	Broken Hill Pty Ltd
CMB	Cradle Mountain Reserve Board
CSIRO	Commonwealth Scientific and Industrial Organisation
CWA	Country Womens Association
HEAT	Hydro Employees Action Team
HEC	Hydro-Electric Commission
IUCN	International Union for the Conservation of Nature
LPAC	Lake Pedder Action Committee
NPB	National Park Reserve Board
NPWS	National Parks and Wildlife Service
NWI	National Wilderness Inventory
RFA	Regional Forest Agreement (Tasmania-Commonwealth)
SPA	Scenery Preservation Act
SPB	Scenery Preservation Board
SWTAC	South-West Tasmania Action Committee
TCT	Tasmanian Conservation Trust
TPFH	Tasmanian Pulp and Forest Holdings
TWS	Tasmanian Wilderness Society
UTG	United Tasmania Group
WHA	World Heritage Area

CHAPTER 1

Introduction

National Parks

Emergence, expansion and roles

National parks occur in a diverse range of landscapes and countries throughout the world. It is widely regarded that the national park idea originated in the United States, where the first national park was created at Yellowstone in 1872.¹ By the last decade of the twentieth century, national parks encompass over 380 million hectares of the Earth's surface and are spread across more than 130 countries.²

From its origins in the United States, the national park idea rapidly found expression in other ex-colonial countries of the New World. Australia's first national park was proclaimed in 1879 (Royal National Park), largely as an urban pleasure ground in bushland to the immediate south of Sydney. Canada's first national park was created in 1885, centred around the hot springs tourist attraction at Banff in the Rocky Mountains. By 1894, New Zealand also boasted a national park, established at Tongariro, in a scenically impressive volcanic landscape.³

Since the proclamation of Yellowstone, the United States has experienced an enormous growth in its national park system. By 1993, 176 internationally recognised national parks were established in the United States, covering an area in excess of 22 million hectares (based on United Nations listing criteria).⁴ Australia and Canada now rival the United States, both in their number and extent of national parks. By 1993, Australia had 415 internationally recognised national parks and equivalent reserves (the largest number of any single country in the world), covering an area of nearly 28 million hectares. Canada was second to Australia in total number of national parks (215), covering

nearly 33 million hectares - the largest total area of any individual country in the world.⁵

During the twentieth century, the national park phenomenon spread throughout the world. National parks in Europe began to emerge early in the century. Sweden was the first country to establish national parks (1909), shortly after followed by Switzerland (1914), Spain (1918) and Italy (1922). By the beginning of the 1940s, 28 national parks had been proclaimed in European countries. In the post-Second World War period there was a rapid expansion of national park systems, and by 1985, over 200 national parks were established throughout Europe.⁶ In the United Kingdom, the National Parks and Access to the Countryside Act was established in 1949, after more than two decades of lobbying for the creation of national parks by interest groups, and all of Britain's ten national parks were established by 1957.⁷ However, in comparison with New World national parks, many national parks in Europe are relatively small in area and largely occupy cultural and highly modified landscapes.⁸

African nations also began to establish national parks in the early decades of the twentieth century. Many of these were created by European colonists to protect large game, and it has been argued that their inception had strong similarities with the early game parks of Europe, which were largely created for the pleasure of the ruling classes.⁹ Early national parks were first established in southern African countries and later emerged throughout the continent. South Africa's first national park - Kruger, for example, was established in 1926 by combining two provincial game reserves in the eastern Transvaal.¹⁰ In the post-Second World War period there was a rapid growth in the creation of national parks throughout African countries.¹¹

While national parks have been established in most regions of the world during the twentieth century, their character, purposes and reasons for emergence vary widely. It has been argued that the spread of national parks in different parts of the world was not simply a result of diffusion of the national park idea from its origins in the United States.¹² The many variations in national parks around the world reflect differences in cultures, economies, histories and environments.

One of the major reasons for the creation of national parks is for nature conservation. Concerns over loss of rare, unique and spectacular flora and fauna have driven the development of a number of national parks around the world. For example, national parks have been established to protect the proteas of Cape Province in South Africa, the rhinoceros of Chitawan in Nepal, China's panda and the giant sequoia of California.¹³ Other national parks have been created to conserve particular vegetation types, habitats and larger scale biological associations. The Manu National Park in the Upper Amazon basin and Virunga National Park in Zaire, for example, both encompass extensive wild areas and contain high biological diversity, while Grasslands National Park in Canada specifically protects grassy ecosystems and Asir Kingdom National Park in Saudi Arabia was established for the conservation of desert ecosystems and landscapes.¹⁴

Many national parks have been created around spectacular landscape features, such as waterfalls, mountains, caves and lakes. Early national parks in the United States were established in monumental mountainous landscapes that were glorified through the exploration and conquest of the American West.¹⁵ Banff National Park in Canada and Stora Sjöfallet National Park in Sweden were similarly established around spectacular waterforms in mountainous areas (hot springs and waterfalls).¹⁶ Picturesque lake scenes feature in the national park of the Lake District in the United Kingdom, while the caves of Guacharos were the focus of reserve creation in Colombia.¹⁷

While nature and scenery preservation have been a major driving force behind the creation of many national parks, these protected areas also serve a variety of other functions. National parks are highly attractive destinations for tourism and recreation, particularly where there are unusual or spectacular landscape features and biological elements. Some national parks play a role in maintaining water supplies for cities, agriculture and electricity generation, provide valuable areas scientific research, and preserve elements of cultural heritage.¹⁸ In recent years, there has also been an increasing recognition of the rights of indigenous people in national parks, many of which were originally established on land they inhabited, which was

vital to their subsistence and the maintenance of some biological processes.¹⁹

Motives behind national park creation

Most research into the development of national parks has focused on early national parks, the way in which they were created and the types of areas in which they were established. Very limited research has been devoted to examining the actual motives of the national park proponents and how these may have changed over time.

While not a result of simple diffusion of ideas from North America, it has been argued that the development of national parks in Australia has stronger parallels with national park developments in New World countries (the United States, Canada and New Zealand), than other areas of the world.²⁰ In the United States, the national park idea is thought to have emerged as part of the romantic movement, which developed in rejection of the dominant exploitative ethos of nineteenth century modernism. Desires to protect nature were linked with new ecocentric and wilderness philosophies, developed by individuals such as Thoreau and Muir.²¹ It has also been argued that the search for a national identity was central to the origins of national parks in the United States, leading to a focus on the preservation of unique monumental scenery in the mountainous west.²²

While concerns over the preservation of nature and scenery may have initiated early national park proposals in the United States, the reasons for their creation are argued to have been related to utilitarian values, particularly those relating to potential financial benefits to be gained through tourism and recreation.²³ That is, early national parks were created in areas then considered to be worthless for other forms of economic development, and were promoted and developed as tourist attractions. Similar ideas have been explored in relation to the development of early national parks in Australia, New Zealand and Canada, where it is also suggested that national parks were established in largely worthless areas, and that tourism and recreational arguments were most significant to their creation.²⁴

While the tourism and recreational roles of national parks have been argued to be central to national park creation, other motives for initiating national park proposals have also been identified. Nature preservation motives were behind many early national park proposals in Australia. Such was the case, for example, in South Australia's first national park, Belair (established in 1891), which was promoted by the Field Naturalists section of the Royal Society, and, it was also the case for the Kangaroo Island fauna and flora reserve, established in 1919.²⁵ In New South Wales, loss of native wild flowers through over-picking led to the Kuring-gai Chase National Park proposal in the early 1890s, and concerns over the protection of indigenous flora and fauna played a role in the creation of Western Australia's first national park (John Forrest National Park, established in 1894).²⁶ The Barrow Island Nature Reserve on the Pilbara coast of Western Australia was established in 1908 through the efforts of the West Australian Natural History Society for the survival of a rare species.²⁷

A number of early national parks in Australia were established in highly aesthetic landscapes or around particular scenic features. For example, the Mt Buffalo National Park in Victoria (established in 1898) was centred around impressive geological features, Queensland's first national park was established at Witches Falls in 1908, and John Forrest National Park in Western Australia also featured attractive waterfalls.²⁸ The scenery preservation motive has been widely discussed in relation to early national park development in Australia.²⁹ Most of this research has focused on the how aesthetic motives were linked with opportunities for tourism and recreation, and how these factors were critical to the outcomes of national park debates.

The development of national park systems and the motivations for establishing national parks have been identified as under-researched fields in Australia.³⁰ The most comprehensive studies of national park development are those of Bardwell (Victoria) and Turner (New South Wales), both doctoral theses written in the 1970s.³¹ The Victorian study focused on the national park concept and identified a high degree of congruence between the establishment of national parks and the creation of parks and gardens throughout history, and concluded that the national park idea was not simply a result of direct diffusion of

ideas from North America, but arose from several sources.³² Turner examined the recreational roles of national parks in New South Wales and argued that the establishment and management of national parks by the social elite resulted in inefficiencies and injustices in park management and rural outdoor recreation opportunities.³³

There are a number of broad overviews of different aspects of national park development in Australia.³⁴ Numerous short historical accounts have also been written on individual national park creation.³⁵ However, there are no detailed studies that trace the development of national parks from their origins to the period beyond the 1970s. Most works that have examined changes in national park development over time have focussed on changes in national park concepts, administration, management and roles.³⁶

The Tasmanian situation

There has been very little research conducted on national park development in Tasmania. Most of that undertaken has been in the context of wider studies, and has focused on the period prior to 1970. The most significant documentation on the origins and evolution of Tasmanian national parks appears in the doctoral thesis of Mosley, in which one chapter was devoted to the origins and functions of national parks to 1962.³⁷ This was examined within the broader context of the geography of recreation in Tasmania.

Mosley discussed how Tasmanian national parks were established largely for the preservation of scenery and unique native flora and fauna, and for purposes of tourism and recreation. Most national parks were established in highly aesthetic landscapes of no economic value.³⁸ Similar themes were identified by Castles, in the context of a study of the Scenery Preservation Board, the body administering Tasmanian national parks to 1971. Castles suggested scientific and aesthetic motives were behind early national park proposals, but the park proponents succeeded through compromise. Arguments based around the potential economic worth of reserves through tourism and recreation had the greatest impact on the outcomes.³⁹

A few other academic works in Tasmania have touched on aspects of national park development, including historical accounts of specific reserves and conservation movements.⁴⁰ However, these have largely comprised ancillary themes in theses focused on other subjects. There are a limited number of brief overviews of national park development in Tasmania and short histories of individual reserves, some of which comprise part of broader historical works.⁴¹ The creation of some early national parks are also discussed in biographies of individuals associated with park creation.⁴² A number of works have provided accounts of selected conservation controversies relevant to the development of national parks in the later decades of the twentieth century.⁴³ However, there have been no detailed studies on the expansion of the national park system in Tasmania in the period post-1970.

There is thus a substantial gap in knowledge about the development of the Tasmanian national park system throughout the twentieth century, and little illumination of motives behind national park proposals and how they may have changed over time. Some authors have identified biases in the national park system towards particular landscape types and biological elements through time.⁴⁴ However, there has been no significant research into how the motives of national park proponents may have driven the expansion of the reserve system in particular directions.

Thesis Aims and Structure

This thesis examines the development of the national park system in Tasmania from 1916 to 1992. The major hypotheses tested are:

- *the motives for creating national parks have changed over time and;*
- *the national park system has developed in response to changing motives and conservation themes.*

These hypotheses are examined in two different parts of the thesis:

Part One aims to identify the dominant motives behind the creation of national parks throughout the twentieth century. The development of the national park system is traced over three major periods of reservation activity in Tasmania: the early period (1916-1937 - Chapter Two); the middle period (1938-1970 - Chapter Three); and the late period (1971-1992 - Chapter Four). In each period, historical documentary evidence is used to identify: the national park proponents and their motives; opposition to establishing national parks; the debates surrounding the creation of national parks; and the outcomes. The evidence is examined through a developmental narrative on the creation of national parks in each period, with the broader objective of identifying motives and whether they have changed over time.

Part Two of this thesis aims to examine the relationship between motives and their expression in the reserve system. Mapping analyses are used to quantify the representation of three major conservation attributes in national parks over each period of reserve development: biological diversity (Chapter Five); scenery (Chapter Six); and wilderness (Chapter Seven). The changing levels of representation of each of these attributes and their relative significance to each other over time are assessed. The methods used in these studies are described in the relevant chapters of the thesis. The results of these analyses are examined with the broader view of determining to what extent the national park system has developed in response to changing motives and conservation themes.

The thesis concludes by drawing together the evidence from the historical study in Part One and the mapping analyses in Part Two and examining the results in relation to the hypotheses (Chapter Eight). These results are discussed in relation to other relevant research and comments made on the significance of the findings in this thesis and the potential for application of the methods used in other settings.

ENDNOTES - CHAPTER 1

1. Hall, C. M. and Shultis, J., 1991. Railways, tourism and worthless lands: the establishment of national parks in Australia, Canada, New Zealand and the United States. *Australian Canadian Studies*, 8 (2), 57-74.

Nash, R., 1982. *Wilderness and the American Mind*. Third Edition. New Haven: Yale University Press.

Nash, R., 1970. The American invention of national parks. *American Quarterly*, 23 (3), 726-735.

Runte, A., 1979. *National Parks: the American Experience*. Lincoln: the University of Nebraska Press.

Runte, A., 1976. The West: wealth, wonderland and wilderness. In: Wreford Watson, J. and O'Riordan, T., (Eds.), *The American Environment: Perceptions and Policy*. John Wiley and Sons, 47-62.

2. World Conservation Monitoring Centre and the IUCN Commission on National Parks and Protected Areas, 1994. *The United Nations List of National Parks and Protected Areas*. IUCN.

3. Hall and Shultis, 1991, *op. cit.*

4. World Conservation Monitoring Centre and the IUCN Commission on National Parks and Protected Areas, 1994, *op. cit.*

5. *Ibid.*

6. Pearce, D. G. and Richez, G., 1987. Antipodean contrasts: national parks in New Zealand and Europe. *New Zealand Geographer*, 43 (2), 53-59.

7. MacEwan, A. and MacEwan, M., 1983. National parks: a cosmetic conservation system. In: Warren, A. and Goldsmith, F. B., (Ed.), *Conservation in Perspective*. John Wiley and Sons, 391-409.

Sheail, J., 1997. "Guardianship and the "Rural Workshop" - the first quarter century of U.K. experience in nature conservation. *Journal of Environmental Management*, 50, 429-443.

8. Pearce and Richez, 1987, *op. cit.*

Stadel, C., Slupetzky, H. and Kremser, H., 1996. Nature conservation, traditional living space, or tourist attraction? The Hohe Tauern National Park, Austria. *Mountain Research and Development*, 16 (1), 1-16.

9. Burnett, G. W. and Butler Harrington, L. M., 1994. Early national park adoption in Sub-Saharan Africa. *Society and Natural Resources*, 7 (2), 155-168.

Neumann, R. P., 1996. Dukes, earls, and ersatz Edens: aristocratic nature preservationists in colonial Africa. *Environment and Planning D: Society and Space*, 14, 79-98.

10. Carruthers, J., 1997. Nationhood and national parks: comparative examples from the post-imperial experience. In: Griffiths, T. and Robin, L., (Eds.), *Ecology and Empire: Environmental History in Settler Societies*. Melbourne University Press, Victoria, 125-138.
11. Burnett and Butler Harrington, 1994, *op. cit.*
12. Bardwell, S., 1974. The National Park Movement in Victoria. Unpublished PhD Thesis, Monash University, Melbourne.
- Burnett and Butler Harrington, 1994, *op. cit.*
- Hall and Shultis, 1991, *op. cit.*
- Miller, K. R., 1984. The natural protected areas of the world. In: McNeely, J. A. and Miller, K. R., (Eds.), *National Parks, Conservation and Development*. Proceedings of the World Congress on National Parks and Protected Areas. Smithsonian Institution Press, Washington, DC, 20-23.
13. Miller, 1984, *op. cit.*
14. *Ibid.*
15. Laurie, M., 1979. A history of aesthetic conservation in California. *Landscape Planning*, 6, 1-49.
- Nash, 1982, *op. cit.*
- Runte, 1979, *op. cit.*
- Runte, 1976, *op. cit.*
16. Hall and Shultis, 1991, *op. cit.*
- Pearce and Richez, 1987, *op. cit.*
17. Miller, 1984, *op. cit.*
18. Lucas, P. H. C., 1984. How protected areas can help meet society's evolving needs. In: McNeely, J. A. and Miller, K. R., (Eds.), *National Parks, Conservation and Development*. Proceedings of the World Congress on National Parks and Protected Areas. Smithsonian Institution Press, Washington, DC, 72-77.
- Miller, 1984, *op. cit.*
19. Carruthers, 1997, *op. cit.*
- Hitchcock, R. K., 1995. Centralisation, resource depletion, and coercive conservation among the Tyua of the northeastern Kalahari. *Human Ecology*, 23 (2), 169-198.
- McNeely, J. A., (Ed.), 1992. *Parks for Life*. Report of the Fourth World Congress on National Parks and Protected Areas. IUCN and WWF.
- Peluso, N. L., 1993. Coercing conservation? The politics of state resource control. *Global Environmental Change*, 3 (2), 199-217.
20. Hall, C. M., 1988. The 'worthless lands hypothesis' and Australia's national parks and reserves. In: Frawley, K. J. and Semple, N., (Eds.), *Australia's Ever Changing Forests*. Australian Defence Force Academy, Canberra, ACT, 441-456.

Hall and Shultis, 1991, *op. cit.*

Pearce and Richez, 1987, *op. cit.*

21. Nash, 1982, *op. cit.*

Oelschlaeger, M., 1991. *The Idea of Wilderness*. Yale University Press.

Runte, 1979, *op. cit.*

22. Laurie, 1979, *op. cit.*

Nash, 1982, *op. cit.*

Runte, 1979, *op. cit.*

23. Runte, 1979, *op. cit.*

Runte, 1976, *op. cit.*

24. Hall, 1988, *op. cit.*

Hall and Shultis, 1991, *op. cit.*

25. Bardwell, 1974, *op. cit.*

Black, A. and Breckwoldt, R., 1977. Evolution of systems of national park policy-making in Australia. In: Mercer, D., (Ed.), *Leisure and Recreation in Australia*. Sorrett Publishing, Melbourne, 190-199.

26. Mosley, G., 1978. A history of the wilderness reserve idea in Australia. In: Mosley, G., (Ed.), *Australia's Wilderness Progress and Plans*. Australian Conservation Foundation, Melbourne, 27-33.

Pouliquen-Young O., 1997. Evolution of the system of protected areas in Western Australia. *Environmental Conservation*, 24 (2), 168-181.

27. Pouliquen-Young, 1997, *op. cit.*

28. Bardwell, 1974, *op. cit.*

Black and Breckwoldt, 1977, *op. cit.*

Jacobs, P., 1998. Mount Buffalo National Park: an historical perspective. *The Victorian Naturalist*, 115 (5), 245-254.

Pouliquen-Young, 1997, *op. cit.*

29. Black and Breckwoldt, 1977, *op. cit.*

Frawley, K., 1988. The history of conservation and the national park concept in Australia - a state of knowledge review. In: Frawley, K. and Semple, N., (Eds.), *Australia's Ever Changing Forests*. Australian Defence Force Academy, Canberra, ACT, 395-417.

Hall, 1988, *op. cit.*

• Hall and Shultis, 1991, *op. cit.*

Mosley, J. G., 1969. Scenic reserve and fauna sanctuary systems in Tasmania. In: Webb, L. J., Whitelock, D. and LeGay, J., (Eds.), *The Last of Lands*. Jacaranda Press, 161-169.

30. Frawley, 1988, *op. cit.*

31. Bardwell, 1974, *op. cit.*

Turner, A., 1979. National Parks in New South Wales, 1879-1979: Participation, Pressure Groups and Policy. Unpublished PhD Thesis, Australian National University, Canberra.

32. Bardwell, 1974, *op. cit.*

33. Turner, 1979, *op. cit.*

34. Black and Breckwoldt, 1977, *op. cit.*

Boden, R. and Baines, G., 1981. National parks in Australia - origins and future trends. In: Mercer, D., (Ed.), *Outdoor Recreation - Australian Perspectives*. Sorrett Publishing, Melbourne, 148-155.

Goldstein, W., (Ed.), 1979. *Australia's 100 Years of National Parks*. National Parks and Wildlife Service, New South Wales, Sydney.

Mosley, 1969, *op. cit.*

Ovington, J. D., 1980. The parks: a national perspective. In: Messer, J. and Mosley, J. G., (Eds.), *The Value of National Parks to the Community*. Australian Conservation Foundation, Melbourne, 45-56.

Pouliquen-Young, 1997, *op. cit.*

35. For example, Cordes, D. D., 1983. *The Park at Belair*. Island Press, Kingscote.

Fernie, L. and Fernie, G., 1989. *In Praise of a National Park: The Origins of the Walpole-Nornalup National Park*. Lee and Geoff Fernie, Western Australia.

Jackman-Muir, J. H., 1982. *Serpentine National Park: A Brief History*. National Parks Authority, Perth.

Jacobs, 1998, *op. cit.*

36. Bardwell, 1974, *op. cit.*

Black and Breckwoldt, 1977, *op. cit.*

Boden and Baines, 1981, *op. cit.*

Mosley, 1969, *op. cit.*

Pouliquen-Young, 1997, *op. cit.*

37. Mosley, G., 1966. Aspects of the Geography of Recreation in Tasmania. Unpublished PhD Thesis, Australian National University, Canberra.

38. Mosley, 1969, *op. cit.*

Mosley, 1966, *op. cit.*

39. Castles, G., 1986. Handcuffed Volunteers. A History of the Scenery Preservation Board in Tasmania, 1915-1971. Unpublished Honours Thesis, University of Tasmania.

40. Byers, M., 1996. Tourism and Bushwalking in the Cradle Mountain - Lake St Clair National Park: Context, Characteristics and Impacts. Unpublished Master of Environmental Studies Thesis, University of Tasmania.

- Davis, B. W., 1981. Characteristics and Influence of the Australian Conservation Movement: An Examination of Selected Conservation Controversies. Unpublished PhD Thesis, University of Tasmania.
- Shackle, P. J., 1968. Conservation: A Study in the Growth of Public Interest. Unpublished Honours Thesis, University of Tasmania.
41. Lord, C. E., 1918. The foundation of the National Park. *Papers and Proceedings of the Royal Society*, 1918, 74-75.
- MacFie, P., 1992. *Mt Field. The Evolution of Tasmania's First National Park, 1830-1960*. Department of Parks, Wildlife and Heritage, Tasmania (draft only).
- Robson, L., 1991. *A History of Tasmania. Volume Two*. Oxford University, Melbourne.
- Sharland, M. S., 1972. *Tasmanian National Parks*. The Mercury, Hobart.
- Weidenhofer, M., 1977. *Maria Island. A Tasmanian Eden*. Darlington Press, Victoria, Australia.
42. Branagan, J. G., 1984. *A Great Tasmanian. Frederick Smithies, O.B.E.* Royal Press, Launceston.
- Giordana, M., 1987. *A Man and a Mountain. The Story of Gustav Weindorfer*. Regal Publications, Launceston.
43. Australian Conservation Foundation, 1972. *Pedder Papers. Anatomy of a Decision*. Australian Conservation Foundation, Melbourne.
- Connolly, B., 1981. *Fight for the Franklin. A story of Australia's Last Wild River*. Cassell Australia Ltd, NSW and Victoria.
- Gee, H. and Fenton, J. (Eds.), 1978. *The South West Book*. Third Edition. Australian Conservation Foundation, Melbourne.
- Green, R., 1981. *Battle for the Franklin. Conversations with the Combatants in the Struggle for South West Tasmania*. Australian Conservation Foundation, Melbourne.
- Hutton, D. and Connors, L., 1999. *A History of the Australian Environment Movement*. Cambridge University Press.
- Mercer, D., 1991. *A Question of Balance*. The Federation Press, NSW.
- Thompson, P., 1984. *Bob Brown of the Franklin River*. George Allen and Unwin Australia, Pty Ltd.
44. Harris, S. and Whinam, J., 1994. Fenced all around - perspectives on the development of nature conservation in Tasmania. In: Moritz, C. and Kikkawa, J., (Eds.), *Conservation in Australia and Oceania*. Surrey Beattie and Sons Pty Ltd, NSW, 327-335.
- Mosley, 1969, *op. cit.*
- Specht, R. L., Roe, E. M. and Broughton, V. H., 1974. Conservation of plant communities in Australia and Papua New Guinea. *Australian Journal of Botany*. Supplementary Series, No. 7.

PART 1

The Creation of National Parks in Tasmania, 1916-1992: Motives, Proposals, Debates and Outcomes

CHAPTER 2

Scenes of Unsurpassed Grandeur

(The Early Period: 1916-1937)

Background

From the mid-nineteenth century, members of the Royal Society of Tasmania (established in 1843) began urging that measures be taken to protect the State's natural areas and native species from exploitation. In the monthly meeting of the Royal Society in April 1876, for example, considerable discussion took place about the "most wanton and barbarous manner" in which fern trees were being destroyed on Mt Wellington.¹ This mountain forms a dramatic backdrop to Hobart, with heavily timbered flanks that were easily accessible from the town. The Society reported how these "beautiful ornaments" were being:

... ruthlessly cut down, and thus by degrees whole valleys had been robbed of their beauty and turned into unsightly wastes.²

The early efforts of the Royal Society resulted in the creation of some small natural area reserves. These included a mountain-top reserve on Mt Wellington, established in 1876 to preserve the natural beauties of the area and provide a recreational ground for Hobart-dwellers, and a small reserve of scientific interest at Southport Caves in 1891.

The exploitation of Tasmanian forests by the timber industry was also becoming a subject of debate in the later decades of the nineteenth century. In 1899, Leonard Rodway, Government Botanist of Tasmania and Royal Society member, read a paper to the Society which he regarded to be one of the first serious considerations of forestry in the State.³ Rodway discussed how limited attempts had been made by past governments to conserve virgin forest and expressed concerns over the waste of timber and considerable loss of forests throughout the State. The forestry debate received much attention, and an 'expert' from the

United Kingdom even gave his opinion on the way the State's forests should be managed.⁴

During the nineteenth century, there was a handful of other individuals engaged in promoting the reservation of natural areas. Some initiatives came from Government Surveyors, whose explorations led them to recommend outstanding scenic areas for reservation.⁵ Occasional pleas also came from members of the public. A Mr Chapman, for example, wrote to the Royal Society in 1875 requesting that a reserve be established in the vicinity of the old convict settlement of Port Arthur (south-east Tasmania) for the preservation of blue gum (*Eucalyptus globulus*). Its timber was eagerly sought by ship builders, and Chapman believed this species was being threatened with extinction.⁶

One individual who played a prominent role in promoting the creation of reserves from the 1890s was the photographer, John Watt Beattie. Born in Scotland, Beattie emigrated to Tasmania with his family at the age of nineteen, where he gained a reputation as an outstanding documentary photographer. His popular 'magic lantern shows' and accompanying lectures brought to public view images of wild and dramatic Tasmanian landscape scenes.⁷

A keen bushwalker with a love of nature, Beattie made numerous photographic expeditions to remote parts of the State. Acclaimed as a photographer with great artistic skill and sensitivity to the subject matter, his work displayed a distinct romantic flavour. He was an admirer of, and associated with, other Tasmanian artists of the romantic tradition, such as W. C. Piguenit and Houghton Forrest.⁸ From dramatic rugged mountain scenes to the sublimity of cascading waterfalls and glassy rivers, he achieved great success in shaping the public's visual image of the island and popularising many of its scenic attractions.

Beattie was appointed Photographer to the Government of Tasmania in 1896, was a member of the Royal Society from 1890, and a member of the Tasmanian Tourism Association and Field Naturalists Club. His photographs were used to illustrate tourist guides, newspaper articles,

public displays and were the basis of a series of stamps. Through his expeditions, Beattie developed concerns over the loss of flora and fauna in the State and the damage being incurred to areas of great scenic beauty. At Royal Society meetings, he gave illustrated lectures of his travels through the State, which he used to promote the creation of secure natural area reserves.

One area actively promoted for reservation by Beattie was the Gordon River on the west coast of Tasmania (Plate 2.1). In a paper and slide show delivered to the Royal Society, Beattie strongly urged that "immediate and vigorous action" be taken to prevent destruction of the Gordon River flora by "timber hunters", arguing:

Apart from the aesthetic side of the Gordon's attractions, its scientific aspect, as contributing a unique display of our West Coast flora, must become apparent to all, and should alone warrant beyond question its rigid protection against axe and fire. It is necessary that urgent measures be taken in bringing about this protection, for already whispers of the erection of a sawmill are in the air, and this, if once established without restrictive precautions, would undoubtedly mean the "beginning of the end" to the beauty of the Gordon. Surely we must see to it that such a menace should not for one moment be allowed.⁹

A prime argument in Beattie's emotional appeal to reserve the area was for the preservation of unique riparian species, including the highly valued Huon pine (*Lagarostrobos franklinii*), threatened by timber cutters and fire. The protection of flora was closely linked with aesthetic considerations, and the scenic values of the river played a central role in its promotion for reservation.

Members of the Royal Society were in full agreement with the proposal to protect the Gordon River area, on grounds of both species preservation and aesthetics. In the monthly meeting of July 1908, a Society member, Dr Noetling, marvelled over the scenery on the river, which he considered to be the finest he had ever seen, stating:

...it would be a great pity if the insatiable timber merchant was allowed to destroy it. It was the duty of the Government to try and preserve that scenery...¹⁰



Plate 2.1: Gordon River scene. Photographer: John Watt Beattie. Source: The Beattie Studio (private collection).

Interestingly, the Gordon's reservation was also supported at this time by the Manager of the Mount Lyell Company (Robert Sticht). The Mt Lyell Company had considerable mineral interests in the adjacent Queenstown area, and was engaged in extensive forest clearance in the area. Sticht regarded the preservation of the scenery along the Gordon as a necessity. In a telegram sent to Beattie, he stated:

Nothing less than the whole range visible to the eye should be reserved. The interests of the pine-getters were paltry compared with the preservation of natural scenery.¹¹

One wonders if his opinion would have differed if the area was known to harbour mineral resources. A considerable amount of gold prospecting had taken place along the Gordon River during the 1850s and 1860s when the Tasmanian Government was desperate to create its own goldrush, but no payable quantities had been found.¹²

Beattie also took an economic line of argument in appealing to reserve the Gordon River, stressing the potential revenue that could be gained from the reservation through tourism, and the otherwise uselessness of the area, stating:

The economic value of this reserve to the state, apart from aesthetic or scientific considerations, may be regarded as practically "nil", the land being worthless for settlement or agriculture, and no minerals have, I believe, been discovered within the proposed area of protection, so that, under such circumstances, the Government lose nothing by its reservation, but, on the contrary, would gain, now and in future years, the approbation and esteem of all right-thinking people in the state.

The preservation of scenery in other parts of the world is receiving the greatest attention, and even in England a society has been formed for the preservation of Swiss scenery. How much greater is the necessity existent in a country like Tasmania, relying so much on her tourist traffic, to preserve by every means within her power attractions without which such a traffic would diminish rather than increase, to the serious loss of the state. One hesitates to put this selfish aspect of the case before a learned society, but 'necessity knows no law', and after all, a public awakening may be better aroused by a proposition in this form rather than from a more scientific standpoint.¹³

However, despite the efforts of Beattie and the Royal Society to create a secure reserve along the Gordon River, no action was taken on their recommendations and the area remained open to continued timber exploitation.

The State's scenic attractions were also becoming an increasing focus of attention for the tourism industry, and were actively promoted from

the later part of the nineteenth century. The Tasmanian Improvement and Tourist Association was created in 1893 with the aim to protect and develop beauty spots and to publicise these natural attractions as pleasure grounds and health resorts.¹⁴ Tourism was steadily increasing and the islands scenic sites were proving attractive to the tourist and a potential growth area of revenue for the State. In 1906, for example, around 9 600 tourists visited Tasmania, many of whom were recorded to have visited the State's scenic attractions.¹⁵

Day trips to beauty spots were also becoming a popular past-time amongst urban dwellers, particularly as accessibility increased through the expansion of railways. Much propaganda was produced to promote the Tasmanian environment and espouse the healing qualities of its natural assets. In 1905, for example, the Tasmanian Government Railways released its *Guide to Tasmania, the Premier Health Resort of the Australasian Colonies*. The temperate climate, lovely beauty spots and many resemblances to English landscapes were proving very attractive to the tourist. In 1912 around 40 000 tourists visited the State.¹⁶

It was against this backdrop of concerns over loss of natural area values in Tasmania, including aesthetic and biological, and a growth in interest in outdoor recreation and scenery based tourism that appeals for the establishment of large national parks began to be made in the State.

National Park Proposals

The Freycinet Peninsula

In 1904, the Royal Society of Tasmania proposed the creation of a large national park on the Freycinet Peninsula (central east coast of Tasmania). The proposal was submitted to the Minister for Lands (Lyne), and stated:

The desirability of setting apart lands for acclimatisation purposes has frequently claimed public attention; but up to the present time

very little thought has been bestowed upon the necessity for preserving our Tasmanian fauna; yet the emu is no longer found on the Tasmanian plains, and the forester is rapidly disappearing, whilst the black opossum has been so persistently hunted that it seems likely to become 'a lost Tasmanian race'. In the interests of science, to say nothing of Tasmanian sentiment, our Government should devote at least one portion of this island to the preservation of native animals.¹⁷

The provision of a suitable area for the protection of native fauna, appears to have been a major driving force behind this proposal. Emotive language was employed in the appeal, and analogies drawn that could even be suggested to engender a sense of shame. The Royal Society submission also included more tangible arguments of economics:

The soil has very little commercial value, whilst for picturesque scenery, delightful walks, and opportunities for tourism, the position is unrivalled as a tourist resort.¹⁸

Highlighting the potential revenue from tourism and the lack of economic value of the area from more traditional sources, may have been thought to lend strength to the argument by referring to the values of those vested in the power of decision making. The Royal Society had on occasion been treated to "beautifully illustrated" lantern slide shows by Beattie.¹⁹ These informed the Society of the character and appeal of the Peninsula, which was undoubtedly of great scenic attraction (Plate 2.2).

The reserve proposal also included some interesting ideas on the practicalities of protecting native fauna. It was considered necessary that the national park be enclosed by a fence at the peninsula's landward end, to prevent native animals from wandering out of the reserve and vermin from getting in. A party visited the area, where they stepped out a line for a six foot wire fence, comprising two widths of three foot rabbit proof fencing.

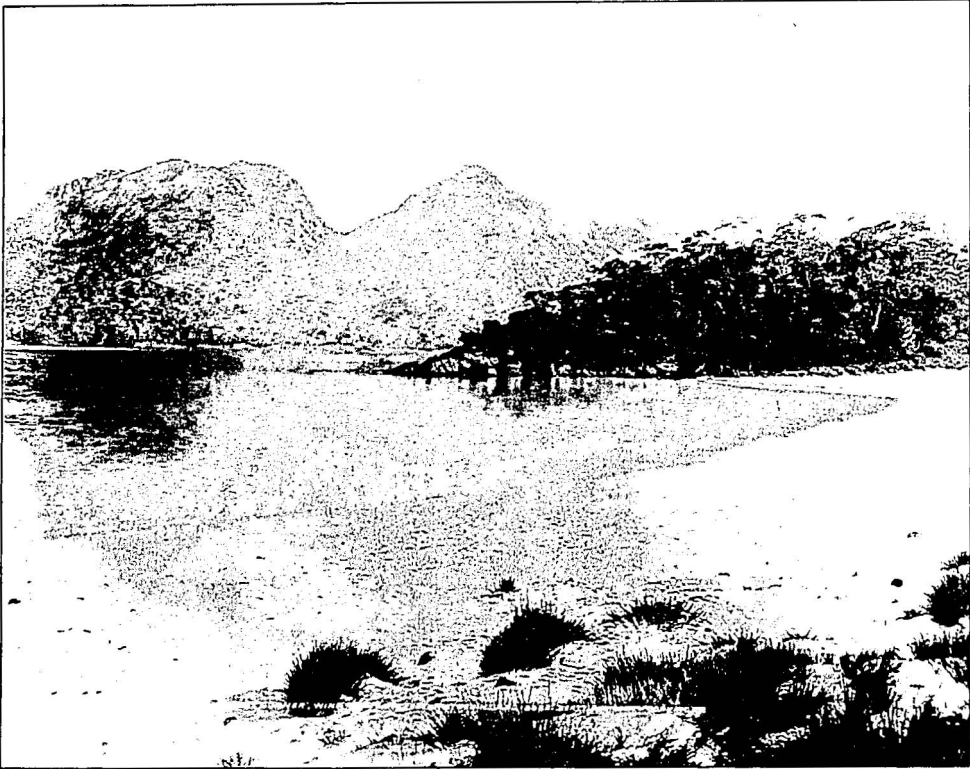


Plate 2.2: Wineglass Bay, the Freycinet Peninsula. Photographer: John Watt Beattie. Source: The Beattie Studio (private collection).

An earlier proposal for the creation of a national park at the Freycinet Peninsula had been made in 1894. The Australasian Association for the Advancement of Science wrote to the Premier of Tasmania (Edward Braddon), urging that the area be reserved as a national park for native fauna protection.²⁰ However, this recommendation was at the time met with some opposition.

The matter was referred to the Royal Society, which received advice from a local landowner, John Meredith of the property 'Cambria', that the Freycinet Peninsula was unsuitable for a national park, "...owing to its geological formation etc".²¹ The peninsula is dominated by large, scenically impressive pink granite hills, which in their upper parts rise above the vegetation as bare rock, which was perhaps considered to limit the available habitat for fauna. Meredith was magistrate at the town of Swansea, close to the peninsula, and was part of an established influential Tasmanian family.²² He was also known to have a keen interest in nature preservation.²³ While not against the idea of a

national park he suggested that Schouten Island, to the immediate south of the peninsula, may be more suitable for this purpose. However, there was no action taken on these early recommendations to reserve the area.

The attempt made in 1904 by the Royal Society to establish a national park on the Freycinet Peninsula resulted in the area being proclaimed a reserve under the Crown Lands Act of 1903. However, the Society was not satisfied with this result, and together with the Tasmanian Field Naturalists Club, pressed for the appointment of a full-time ranger and made further pushes to have the area proclaimed a national park. The Tasmanian Field Naturalists Club held its Easter camp in 1908 at Wineglass Bay (Plate 2.3), and observed that numbers of marsupials had dropped significantly since their visit to the peninsula of several years previous. They were concerned that without suitable management and policing of the area, the fauna would soon be depleted.²⁴



Plate 2.3: The Tasmanian Field Naturalists Easter camp at Wineglass Bay, Freycinet Peninsula, 1908. Photographer: John Watt Beattie. Source: Archives Office of Tasmania.

However, despite repeated appeals from the Royal Society and Tasmanian Field Naturalists Club, the government did not afford the peninsula any greater protection. The removal of large areas of land from selection, for preservation in perpetuity, required appropriate legislation and governmental will.

The earliest reserves established in natural areas in Tasmania were proclaimed through the Waste Lands Act of 1863. Prior to this Act, the disposal of Crown lands was regulated by a number of separate Acts of Parliament. The Waste Lands Act allowed Crown land to be excepted from sale and reserved for public purposes. Under the provisions of Section 2 of the Waste Lands Act, Crown land could be reserved as:

...places for the recreation and amusement of the inhabitants of any city, town or village...or for any other purpose of public safety, convenience, health, or enjoyment...²⁵

The Waste Lands Act of 1863 was superseded the Crown Lands Act of 1903, in which the terms of reference for reserve proclamation remained the same - for the health, amusement and enjoyment of the public.²⁶ By the end of the nineteenth century, the number of reserves established in natural areas was relatively low. In 1899, there were one hundred and seven reserves listed in Tasmania, categorised as recreation grounds, racecourses, cricket grounds, show grounds and for other like purposes.²⁷ Of these, only twelve were specifically of natural areas and were centred around scenic attractions. These included falls, scenery, caves, and a fernery reserve (Table 2.1).

The terms of reference for designating reserves were expanded with the passing of the Crown Lands Act of 1911. Under Section 11 of the Act it was specified that reserves could be designated:

...as sanctuaries for birds, or acclimatisation purposes; for the preservation of game or fauna or flora, either native or imported; and for any purpose of public safety, convenience, health or enjoyment.²⁸

This was the first formal and legal provision that specified Crown land could be removed from selection for the preservation of Tasmanian

native fauna or flora. A number of areas were reserved under the Crown Lands Acts in the early years of the twentieth century. These included narrow strips along the Gordon and King Rivers, the Ben Lomond Plateau, and Mt Wellington.²⁹

Table 2.1: Reserves of natural areas in Tasmania, 1899. Source: Reserves for Recreation Grounds etc. *Journals and Printed Papers of Parliament, 1899, No. 64.*

Type of Reserve	Location	Size (acres)
Scenery Reserve	Honeywood	4
	Forestier's Peninsula	?
	Eaglehawk Neck	?
	Blowhole	?
	Adventure Bay	1000
Cave Reserve	Parish of Kendall	?
	Town of Ugbrook	37
	Town of Ugbrook	300
	Town of Ugbrook	99
Falls Reserve	Tyenna	300
	South George River	?
Fernery Reserve	Honeywood	15

However, the Acts under which early reserves were established, included provisos that any lands reserved could be revoked if they were afterwards found to be not required or unsuitable for the purposes for which they were reserved. They thus offered only a tenuous level of security, and the way was open for revocations if profitable uses were found.

The lack of security and management of these reserves was a growing concern among those interested in nature preservation. The Field Naturalists Club and Royal Society had noted decreases in fauna populations on the Freycinet Peninsula, and other reserves were similarly under threat. For example, it was feared that visitor use was damaging the water catchment area in the Mt Wellington reserve, and the Gordon River reserve was rumoured to be threatened by further sawmilling activities.³⁰

However, the expense of establishing and maintaining national parks in the State was for a long time considered by successive State Governments to be prohibitive.³¹ Despite continued efforts during the

early years of the twentieth century, the reserve proponents had no success in establishing a national park on the Freycinet Peninsula.

Mt Field

In 1885, a small 300 acre (121 hectare) reserve was established around the scenic attraction of Russell Falls, near Mt Field in Tasmania's south. This reserve was also under threat from timber cutting activities, which would be facilitated by the extension of the Derwent Valley railway to Tyenna.³² The rainforest timber, sassafras (*Atherosperma moschatum*) was particularly sought from this area for making sassafras beer.³³ Increasing numbers of visitors were also impacting on the reserve.

The Russell Falls reserve was well established as a Tasmanian beauty spot and a number of people began publicising the damage to the reserve from 1913. This included local hotel operators, such as the Marriott family, whose income was largely dependent on the Russell Falls scenic attraction.³⁴ Among those with interests in the area was a little known individual, William Crooke, who began to agitate for the creation of a large national park in the Mt Field area (Plate 2.4), which would incorporate the Russell Falls reserve at its entrance.

William Crooke was a school teacher and a keen angler, who wrote an angling column in the Hobart *Mercury* under the pen-name, 'Jollytail'. He regularly fished the Russell River and the pools below Lady Barron and Russell Falls, and was familiar with North American angling techniques and the American national park system.³⁵ It has been suggested that Crooke's Mt Field national park idea may have had parallels with Yellowstone National Park in the United States.³⁶ Crooke was critical of the facilities for visitors in the Russell Falls/Mt Field area, particularly for those who made the extended trek to the Mt Field plateau to the west of the falls. In his capacity of Chairman of the Childrens' Excursion Association, he was instrumental in organising the first formal nature excursions for school parties, which included trips to the Mt Field area. Crooke was also at varying times associated with other influential groups, including the Workers Political League, the Workers Educational Association and the Southern Tasmanian Railways Association.³⁷

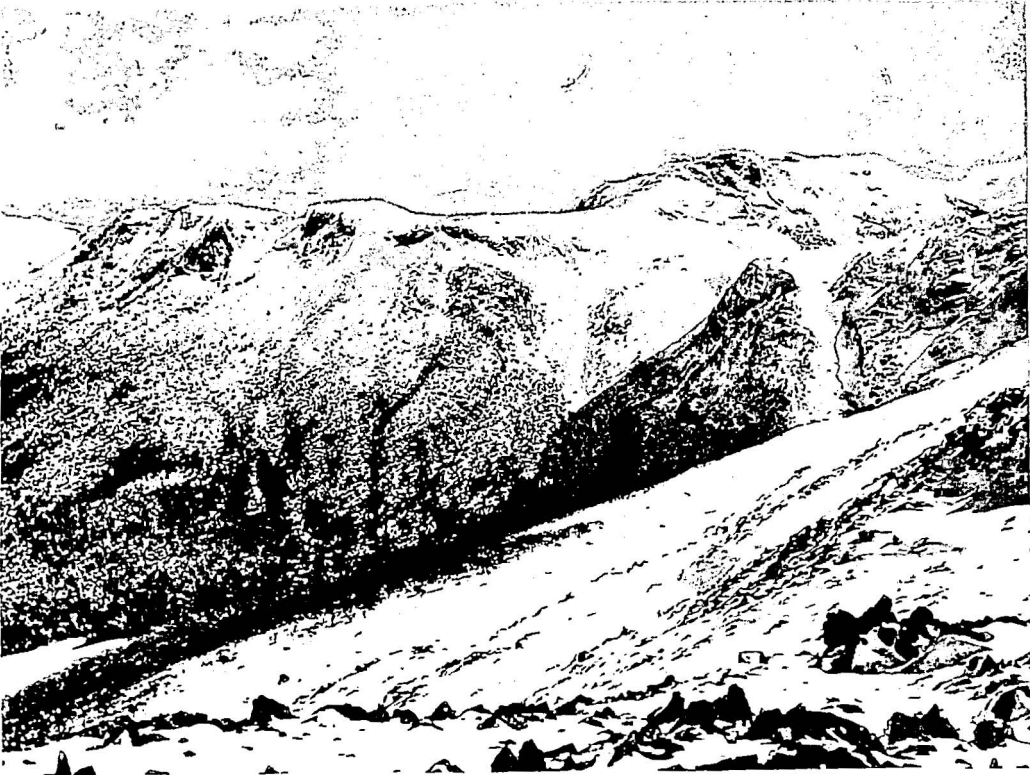


Plate 2.4: Mountain scene, Mt Field area. Photographer: John Watt Beattie.
Source: The Beattie Studio (private collection).

In 1912, Crooke formed the National Park Association, with the primary aim of lobbying for a national park at Mt Field. He acquired the support of organisations and individuals with varying interests in the Mt Field area, some of whom had similarly toyed with the idea of a national park being established around Mt Field.³⁸ The National Parks Association consisted of members of the Royal Society, Field Naturalists Club, University of Tasmania, Hobart City Council, Fisheries Commission, New Norfolk Council and Australian Natives Association. The Southern Tasmanian Railway and Exploration League, the Tasmanian Tourist Association and the Forest League also lent support to the Mt Field national park idea.³⁹

Most active in the National Park Association were William Crooke, Leonard Rodway, Clive Lord, John Watt Beattie, Professor T. T. Flynn, Henry Dobson, H. R. Nichols and his son, Herbert Nichols. These were

all highly influential individuals, whose appointments and positions in society lent considerable strength to the national park idea.

Leonard Rodway (Plate 2.5) was Honorary Government Botanist of Tasmania and a Royal Society member. A scientist, born in Britain, he resided in Tasmania from 1880 until his death in 1936. With a passion for plants, Rodway was also a keen bushwalker and explorer. He was said to be strongly influenced by the American born director of the Tasmanian Museum, Alexander Morton, and presumably was familiar with national park movements and achievements in the United States, and elsewhere in Australia.⁴⁰



Plate 2.5: Leonard Rodway, Government Botanist of Tasmania. Source: Archives Office of Tasmania.

With a common interest in nature, Leonard Rodway often tramped the wilderness with Clive Lord. Lord held an impressive number of positions in organisations with interests in the creation of a national park. He was at various times Secretary of the Royal Society, co-founder and Secretary of the Field Naturalists Club, a Commissioner of the Salmon and Freshwater Fisheries, State Secretary of the Australasian Association for the Advancement of Science, President of the Royal Australian Ornithological Society and a fellow of the Linnean Society of London. Lord was also appointed Director of the Tasmanian Museum in 1918 and was a foundation member of Hobart Rotary.⁴¹

Professor T. T. Flynn was a biologist with interests in nature preservation (and father of the famed actor, Errol Flynn). He was a lecturer in zoology at the University of Tasmania, a trustee of the Tasmanian Museum and Botanical Gardens, and a member of the Workers Educational Association. In 1912, Professor Flynn was part of the Australian Antarctic Expedition.⁴²

Interests in a national park were not confined to the naturalists. Henry Dobson was also an active supporter of the idea, and as a lawyer and Tasmanian Member of the House of Assembly and Senator (1901-1910), was in a position of considerable influence.⁴³ He was a philanthropist, concerned with the under-privileged, perhaps suggesting connections between the poor urban conditions of city-dwellers and popular ideas of the positive health aspects of nature.

The National Park Association was fortunate in having strong support from the *Hobart Mercury*, through its editor, H. R. Nichols. Known as a radical political activist and republican, Nichols wrote strongly in favour of nature preservation.⁴⁴ Although he died in 1912, he had established the *Mercury* as a newspaper that advocated the preservation of nature through the creation of permanent reserves. This was a stand that the *Mercury* was to continue for some time.

Herbert Nichols (son of H. R. Nichols) was also a supporter of nature preservation and a member of the Australian Natives Association. He had a political career as a Member of the House of Assembly and

prominent Hobart barrister, later to become Chief Justice and Acting State Governor.⁴⁵ He too was a keen bushwalker and spent many years exploring the Mt Field area with Leonard Rodway and Clive Lord.⁴⁶

The promotion of the national park at Mt Field was in the hands of a highly influential and interconnected group, who comprised part of the southern Tasmanian intelligentsia. Interestingly, the man who was responsible for directing their energies, William Crooke, was not until then, aligned with any organisation that had previously lobbied for national parks in the State, such as the Royal Society. Yet he was able to secure their support, as well as that of other organisations, such as the Railway Department, that were driven more by the opportunities of revenue than concerns over nature preservation.

In 1913 the National Park Association made a deputation to the Minister for Lands (Mulcahy), to reserve 22 000 acres (8 900 hectares) of land around the Mt Field area as a permanent national park.⁴⁷ The reserve proponents described the area as possessing:

...a diversity of lake and forest, of stream and hill. In parts there are unsurpassed forests of eucalypts, myrtle, beech, blackwood and sassafras, carpeted with tree ferns and giant grass trees. The entire locality is indescribably beautiful, and is singular in this respect, that the whole of the rich flora of the west coast is there, growing sided by side with the flora of the other parts. Nature almost seems to ask us that some attempt should be made to treasure and preserve this spot, upon which she has lavished all her charms.⁴⁸

Scenery preservation and general nature preservation both comprised significant arguments raised in the promotion of the national park at Mt Field:

The Russell and Lady Barron Falls were within the park, which commanded a magnificent view of Southern Tasmania. The park could be made a sanctuary for Tasmanian fauna and flora, which should not be allowed to die out.⁴⁹

Together with these aesthetic and biological motives were clear appeals to the tourist and recreational potential of the area. It was argued that the Mt Field area:

...presented a combination of natural beauty and sublimity of a character not to be rivalled in the Commonwealth. The reservation would for all time be a region of delight for the people of Tasmania, which they could proudly invite visitors from other States to explore.⁵⁰

The Mt Field National Park proposal was met with resistance from the Liberal Government led by Premier Solomon, which objected to the national park on ground of size, management and economics.⁵¹ Mulcahy preferred the idea of small areas that could be fenced, arguing that the 'locking-up' of large areas of land for nature preservation could pose barriers to potential utilisation and development for more economically valuable purposes in the future.

The use of the word "National" in the name of the proposed reserve was reported to be even enough to put Mulcahy on guard. However, members of the National Park Association did not agree with the Government's objections, and even considered the ideas and attitude of Mulcahy as laughable. It was reported, with a fair degree of sarcasm:

The proposal for a national park...is altogether too large for Mr Mulcahy, and we are astonished that a gentleman of the 'acumen' of Mr William Crooke could have dreamt of placing such impossibilities before a Minister whom he has so recently accused of partial...paralysis.⁵²

In considering the proposal, Mulcahy asked the assistance of the Association to enable him to reserve a number of small areas, rather than a large national park. It was reported:

In what manner he is to be assisted the Minister does not indicate, but doubtless at present is in need of assistance, and the expression was an involuntary indication of his inner communings.⁵³

In a final dig the editorial suggested:

If Mr Mulcahy can be induced to progress from reports to practical proposals, a process he is not fond of, the Deputation will at least have performed a miracle.⁵⁴

Establishing national parks in the State would involve the government in ongoing expense, and this was a very significant factor behind governmental opposition. The Solomon Government did make a small concession to the National Park Association by removing an area of 5 000 acres (2 234 hectares) from selection. However, this was not enough to satisfy the national park proponents, who wanted a larger more secure reserve.

A second deputation was made to the government by the National Park Association in 1914.⁵⁵ A new Labor Government led by John Earl had just succeeded the Liberal Government of Solomon and considerable parliamentary discussion was devoted to the proposal. The National Park Association drew attention to the economic gains that could be made through tourism and the lack of commercial value of the area for other purposes. It was argued that the Railway Department "would derive a handsome revenue from the park if it were made a popular resort".⁵⁶

The small reserve at Russell Falls, which would be incorporated in the national park, had already proved profitable for the Derwent Valley Line - one of the few paying railways in the State. The national park, it was argued, would greatly increase tourism, and its value "could not be exaggerated".⁵⁷ There were even grand plans discussed for the extension of the Derwent Valley Line to the west coast of Tasmania, passing by the national park, which would be used to advantage as a tourist resort.⁵⁸

The tourism argument was supported by drawing attention to the worthlessness of the land for economic development, including grazing and other agricultural purposes. It was stressed that:

From an economic standpoint...more money could be made out of the area by making it into a National-park than by using it in any other way.⁵⁹

The reserve proponents also stressed the necessity of drafting and passing new legislation, under which this and other reserves could be proclaimed and effectively managed, and requested the appointment of a ranger to the national park to provide protection.

The arguments raised in favour of the national park proposal were eventually successful. In 1915, the Earl Government approved the reservation of 27 000 acres around the Mt Field plateau (10 900 hectares) - 5 000 acres more than the original proposal. The Scenery Preservation Act of 1915 was shortly after passed by parliament, under which the Mt Field area was officially proclaimed a Scenic Reserve in 1916.⁶⁰ It is likely that the tourism argument, and its links with scenery preservation, had the greatest impact in convincing the decision makers of the value of the reserve. However, there were also strong nature preservation motives behind the Mt Field National Park proposal. In their deputation to the Government, members of the National Parks Association had argued:

The national park should serve several purposes, and be representative of the natural character of the country. It should contain specimens of the native flora and fauna. It was only in a large area that animals would have a chance to survive...it was desirable that native animals, which were becoming scarcer, should be preserved from extinction, such as the Tasmanian devil, platypus etc.⁶¹

The nature preservation motive was also evidenced in the speech made by William Croke at the opening of 'The National Park' in 1917. The *Mercury* reported:

The idea of the Park was not originally conceived simply for tourists. Only by preserving a Park in this way would the people of Tasmania in the far future be able to see what primeval Tasmania was like. That was one of the objects. Another was for the preservation of the

native flora and fauna, and still another, the recreation of the people of Tasmania. The tourists to his mind, come last, although they were pleased to see them.⁶²

The *Mercury* had been consistently in support of the national park proposal throughout the years it was mooted, even to the point of rising in unswaying defence of the natural values of the reserve:

The only creature to be driven out of the Park and kept out with flaming swords is the Utilitarian, who would indiscriminately chop trees, spoil waterfalls, dig up rare plants, kill live things, and spoil and ravage and destroy everything for a money profit. If there ever came to exist legislators who cannot see the value of such a place we hope it will become a recognised custom to shoot them on sight whenever seen within three miles of the park.⁶³

The sentiments expressed in the editorial, point to the primary purpose of the reserve as being a place where nature could be protected, against imminent destruction, driven by what the *Mercury* touted as that most evil of forces, "filthy lucre".⁶⁴ The tones employed in this passage should perhaps be viewed in the light of global events of the time, in which Tasmania was intimately entwined. The Great War, then raging through Europe, dominated media attention and even reporting on the national park seems to have been influenced by aggressive and militaristic language.

The nature preservation and aesthetic motives were remarked on by the geologist and Chairman of the Tasmanian Field Naturalists Club, Dr Lewis, who in 1921 conducted a field trip to Mt Field National Park, with the aim of providing a sketch of the geology and geomorphology of the area. Very little was actually known about this reserve, and those responsible for its administration were keen to document the area, themselves exploring the reserve and encouraging others to engage in scientific research. Lewis wrote:

The Park was originally set aside in an endeavour to preserve some native fauna and a little of the romantic virgin bush from the depredations of a misguided civilisation.⁶⁵

In 1916, Tasmania could finally boast a national park (Figure 2.1). In a ceremony "worthy to rank with the epoch-making events in the history of Tasmania", Mt Field National Park was officially opened by the Governor, Sir Francis Newdegate, on October 13, 1917.⁶⁶ Two trains packed with passengers made the trip from Hobart to Mt Field for the occasion. After partaking in a picnic lunch, various dignitaries gave speeches about the significance of the National Park, and in so doing, drew heavily on Tasmanian pride and sentiment.

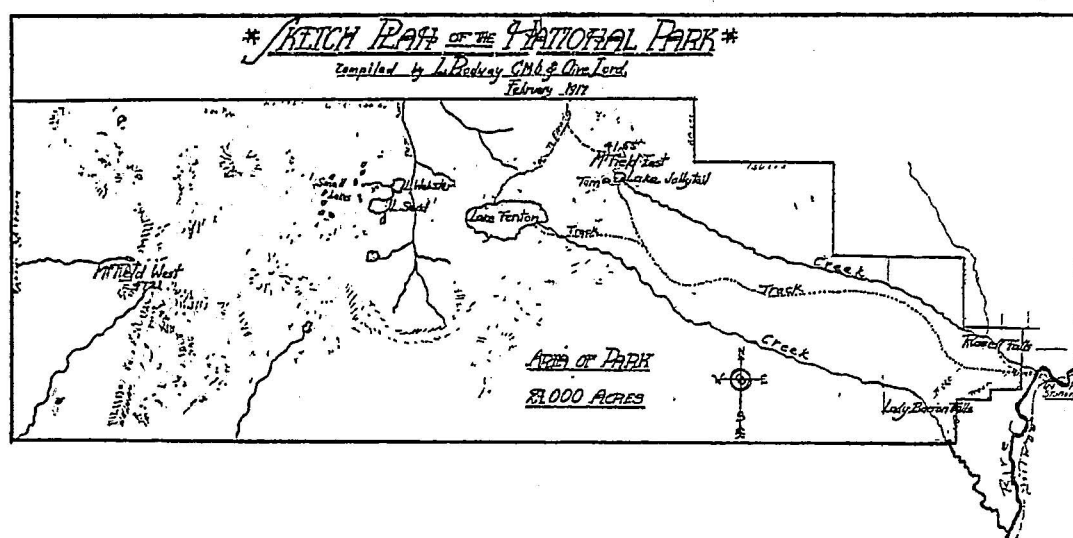


Figure 2.1: Sketch map of Mt Field National Park, 1917. Source: *The Mercury*, 9/11/1917.

Analogies were drawn with the creation of parks elsewhere in the world, the tourist potential of the area was extolled, and hearty congratulations extended to those responsible for the park. Amid cheers, the Governor officially opened the National Park, and with silver key, unlocked the newly erected white timber entrance gates (Plate 2.6). The National Anthem was sung and celebrations continued throughout the afternoon, which was, ironically, devoted to wood chopping matches.⁶⁷

The creation of Mt Field National Park occurred during World War One. It has been suggested that the acceptance of the park idea may

have been made easier by this. Tasmanians could feel proud in their achievements of preserving a pristine landscape, while Europe was being destroyed.⁶⁸ It was a positive among the many negatives of the time. Even the topographic features of the Park did not escape the nationalistic fervour that continued into the years beyond the Great War. A special nomenclature committee established in 1919 by the National Park Board (the body administering Mt Field National Park) recommended, *inter alia*, that the name of Mt Field West be changed to Mt Anzac and Tyenna Peak to Mt Gallipoli. It was the opinion of the committee that, "these new designations would serve as a splendid memorial to Australia's part in the war of 1914-1918".⁶⁹ However, the nomenclature report was not to the liking of all members of the National Park Board, and the recommendations were not enacted. Rodway disapprovingly said, "he did not like the overdoing of the war business".⁷⁰



Plate 2.6: The opening of Mt Field National Park, 1917. Photographer: John Watt Beattie. Source: Archives Office of Tasmania.

The Scenery Preservation Act (SPA) of 1915 has been acclaimed as the most progressive park legislation in Australia for its time.⁷¹ Under the terms of this Act, a central authority was created to manage the assets under its control - the Scenery Preservation Board (SPB). The SPB consisted of the Surveyor-General as Chairman, the Commissioner of Railways, the Engineer-in-Chief, a representative of the State Tourist Department and three other interested individuals. A subsidiary board, the National Park Reserve Board was established to administer Mt Field National Park.

The Freycinet Peninsula was also declared a reserve of 18 630 acres (7 541 hectares) under the SPA in August 1916, and technically shared the same legal status and title as Mt Field - a 'Scenic Reserve'. However, Mt Field was touted as 'The National Park' of Tasmania. Although the Freycinet Peninsula had a longer history of promotion as a national park, it was not as established as a tourist destination as the Mt Field area, which was made popular by the Russell Falls. Nor was it as accessible, being a further distance from Hobart, and not connected by a railway.

Cradle Mountain

While the focus was initially on Mt Field, there were also movements in the north of the State to establish a large national park in the Cradle Mountain area (central Tasmania). The first moves to create a national park at Cradle Mountain came from Gustav Weindorfer (Plate 2.7) - an individual with a personal interest in the area.

Born in Austria and educated at an agricultural college near Vienna, Weindorfer emigrated to Australia in 1900. He initially resided in Melbourne, where his interests in botany and outdoor activities led him to form associations with local nature enthusiasts. Weindorfer joined the Victorian Field Naturalists Club (founded in 1880) and in 1903 became a member of the Royal Geographic Society. He became an active member of these groups, corresponding with botanists around the world, and sending botanical collections to museums in Vienna.⁷²



Plate 2.7: Gustav Weindorfer of Cradle Mountain. Photographer: Fred Smithies. Source: Archives Office of Tasmania.

Weindorfer met his wife, Kate Cowle, through the Victorian Field Naturalists Club. Kate was born in the Fingal area of north-east Tasmania, and the two of them moved to Tasmania, where they purchased a farm in the north-west. Both bushwalking and nature enthusiasts, their honeymoon was spent climbing Mt Roland. Weindorfer was very impressed with the mountainous Tasmanian

scenery, and began to explore further afield. This led him to the Cradle Mountain area (Plate 2.8), which he first visited in 1909, with a friend and fellow nature enthusiast from Victoria, Dr Sutton.⁷³

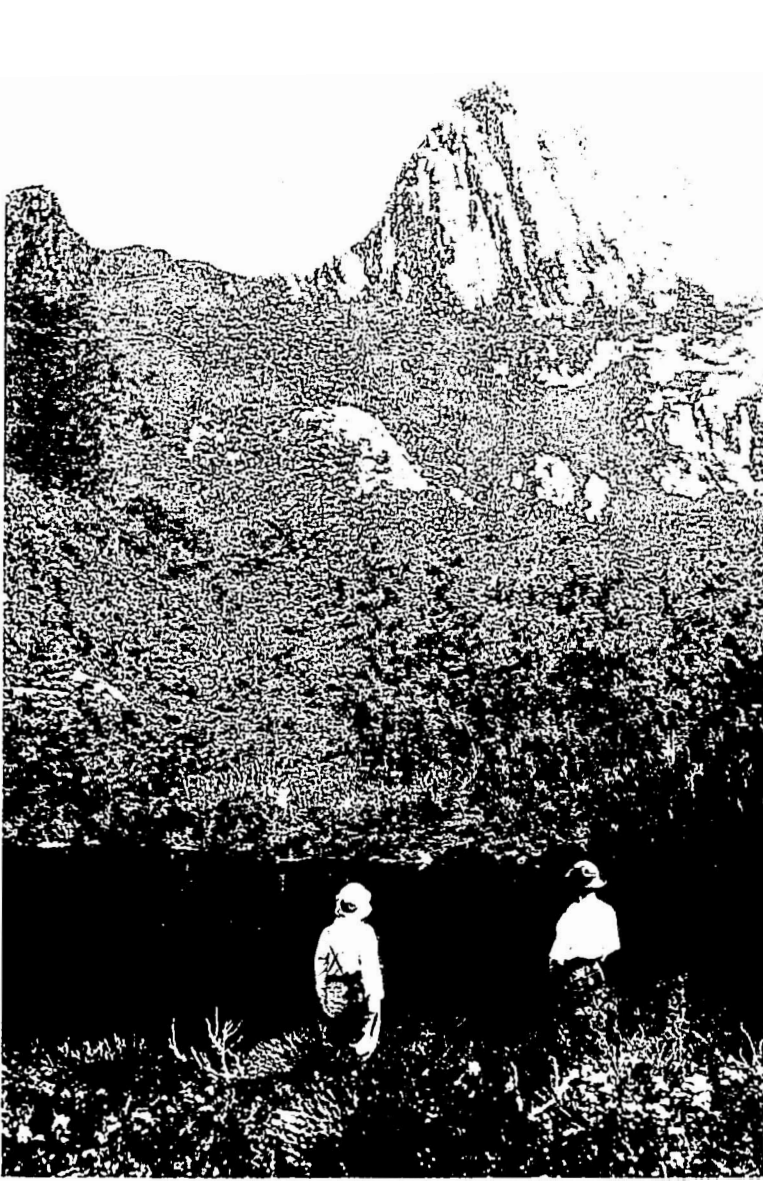


Plate 2.8: Cradle Mountain and Dove Lake. Fred Smithies expedition - Cradle to Tullah, 1926. Photographer: Fred Smithies. Source: Archives Office of Tasmania.

Weindorfer created much interest in the Cradle Mt area through botanical articles published after trips to the area in the *Launceston Examiner*, *Weekly Courier* and further afield, in the *Victorian*

Naturalist.⁷⁴ He was fascinated with the alpine flora and moved by the spectacular mountain scenery. On a trip to Cradle in 1910, Weindorfer, his wife and their neighbouring farmer, Smith, reached the summit of the great mountain for the first time. Struck by the scenic grandeur that unfolded before him, Weindorfer stood at the summit of Cradle Mountain and declared portentously, "this must be a national park for the people for all time".⁷⁵

Weindorfer was determined that the alpine flora and scenic majesty of the area should be enjoyed by more people, and set about building a chalet in Cradle Valley, where he could accommodate tourists. Few visitors journeyed to 'Waldheim' in its early years. Access to the area was poor, with the rough track often boggy and difficult to negotiate, and prices were high. However, in the summer of 1916, some highly influential men made the journey, including Emmett (Director of the Government Tourist Bureau), Clive Lord, Leonard Rodway, and Professor Flynn.⁷⁶ The alliances formed were to prove most favourable to the national park idea.

Impressed with what he had seen, Emmett took up the national park cause after his trip to Cradle in 1916, and at a meeting of the SPB (of which he was member), moved that the Cradle Mountain area be reserved as a national park for scenic purposes.⁷⁷ Members of the SPB agreed with the idea and responded by having 35 000 acres (14 160 hectares) of land removed from selection as a 'proposed scenic reserve'. The matter was revived in 1921, when Weindorfer and Emmett upped the pace in their campaign for the Cradle Mountain National Park. The proposal was launched on the public through a series of lecture tours and slide shows. The press, which supported the idea, was used as a medium to promote the reserve and reported on the growing support for the proposal.

Other enthusiasts also lent their support to the Cradle Mountain national park idea. Prominent amongst these were Fred Smithies, nature lover and intrepid explorer, and Herbert King, a photographer with a particular interest in botany. Both visited Waldheim in 1920 and became close friends with Weindorfer. Smithies gave much assistance to Weindorfer with the promotion of the national park,

including delivering illustrated lectures and publicising the natural wonders of the area through the press.⁷⁸

In the years around the initial attempts to create a reserve at Cradle Mountain in 1916, the world was at war. The nationalism generated by the war created some public suspicion about Weindorfer, who was of Austrian heritage. His reclusive lifestyle based largely around his isolated chalet at Cradle Mountain erroneously bolstered these fears.⁷⁹ Weindorfer's efforts to create a national park in the Cradle Mountain area were dimmed during the war years, and it was not until 1921 that the Cradle Mountain National Park campaign began again in earnest.

Throughout 1921 and 1922, Emmett delivered promotional lectures in Launceston and Hobart, and the north-west population centres of Deloraine, Latrobe, Devonport, Ulverstone and Burnie. The Cradle Mountain area was reported in the press to contain some of the finest alpine scenery in the world:

...scenery which would resemble but probably surpass the magnificence of sections of the Yosemite Valley, Crater Lake, and Yellowstone National Parks in the west of the United States.⁸⁰

The area was of unquestionable scenic beauty, and was considered by the protagonists to be admirably suited to reservation as a scenic park, "the views from the various eminences being amongst the most beautiful in Tasmania".⁸¹ The aesthetic value of the area, backed by the tourist potential this afforded, came to the fore in the promotion of the Cradle Mt area as a national park, and was widely endorsed. The Chairman of the Field Naturalists Club (Lewis), for example, in a special meeting called in Hobart to discuss the proposed reserve, said:

The idea of reserving areas of country where the best of our natural beauty spots were situated was a good one. Tasmania was full of beautiful places, and anything in the way of preserving them - not so much from civilisation, as from fires and wonton vandalism - was always a good one.⁸²

Behind this desire to reserve the best of Tasmania's scenery, was the knowledge that it was under threat. The beauty of the Cradle Mt area lay in its rugged alpine topography and intricate patterns of vegetation interspersed with an array of lakes. Sensitive alpine flora and native fauna were being lost through fire, which resulted in unsightly scars on the landscape. A trip to the proposed reserve by Emmett, Lord and other enthusiasts from Hobart and Launceston in January 1922, revealed the extent of some of the damage:

A peep over the ridge to the east revealed a magnificent cirque between the two great mountains, its sides hung with tapestries of green of varying shades, but marred by great patches of black where the fire-stick had done its nefarious work at the bidding of the coal prospector.⁸³

Scenery and tourism were given foremost attention in promotional lectures, press reports and reserve proposals. Along with the aesthetic arguments, were also deep concerns about the loss of native flora and fauna in the area. In an interview with the *Examiner*, Weindorfer expressed these concerns, stating:

Ten years ago...one could rouse thirty kangaroo in a day without the aid of a dog, but now one is rarely seen. The animals must be protected...and in this way, those parts of the state now depleted could be re-stocked.⁸⁴

Weindorfer's observations, gained from years living in the area, were that a great slaughter of game had been taking place. He suggested a closed season on the hunting of possum, kangaroo and wallaby for three years, "unless it was the desire to have the fauna of the country decimated".⁸⁵

It was argued that the creation of a national park in the area would ensure the survival of native animals and also provide a breeding ground for those that were fast disappearing elsewhere in the State.⁸⁶ The loss of flora and fauna became the concerns of many active in the promotion of the Cradle Mountain National Park. In their trip to

Cradle in January, 1922, Emmett, Lord and other members of the group gained first-hand knowledge of the extent of depletion, reporting:

Many opinions were exchanged on the details of the scenery, but all agreed that the area should be reserved if only to check further destruction of the flora by fire, and to protect the native fauna. Not one animal was seen during the whole trip, and but few birds.⁸⁷

Emmett, whose initial interest in the area stemmed from his position as Director of the Tourist Bureau, was also concerned about damage to scenery and native species depletion. In appealing for the reservation of the area in the *Examiner*, he remarked that "it was no good waiting till all the game and the ferns and wild flowers had disappeared".⁸⁸ Admittedly, this could effect the tourist potential of the area. However, the message was reiterated by Rodway, who said of the proposal, "...the main object was to protect the native animals from indiscriminate slaughter, and the native flora from destruction by fire".⁸⁹

While the desire for nature and scenery preservation lay behind the proposals, it was the potential economic value of the area for tourism that was given greatest credence in the arguments made to the government. As in the case of Mt Field's promotion as a national park, the reserve proponents were well aware of the strength of the economic line of argument. It was said that the proposed 'Northern National Park' as a tourist attraction to Tasmania, "should be a weighty factor with the department concerned".⁹⁰

Assurances were made that the area concerned was an economic wasteland and of no practical use. It was argued to be unsuitable for agricultural and pastoral purposes, did not contain significant amounts of marketable timber, and its only tangible value was as a tourist resort.⁹¹ However, on this score, the government was not convinced.

It was known that minerals of value did occur in the vicinity of Cradle Mountain. In 1892, copper was discovered between Mt Pelion and Mt Oakleigh, and the deposit was briefly mined in 1916 by Mt Pelion Copper Mines. The opening-up of this area had also revealed another valuable mineral. In 1916, Patrick Hartnett discovered wolfram in

quartz veins, while working on the road to the copper mine. The main wolfram-bearing vein was worked by Mt Pelion Copper Mines in 1919, but again, operations were short lived.⁹²

The possibility of extracting oil in the area of the proposed Cradle Mountain reserve was also being explored in the early 1920s. The Tasman Oil Company had opened up exploration fields at Barn Bluff, and was engaged in putting in a system of test trenches, to assess the quantities of deposits. In 1921, two consultant geologists from the Adelaide Exploration Company explored the viability of oil fields in the area. The geologists found oil and natural gas in the shales of the bluff, and the oil was reported to be of especially fine quality, containing very valuable properties.⁹³

Coal prospecting had also left its mark on the landscape. With the aid of fire to increase ground visibility, large areas of vegetation in the area had been burnt in the search for coal. Although no significant coal or oil deposits were worked, and the interests in copper and wolfram were brief, these activities gave tangible evidence of the area's potential economic value. The interests of both the government and industry were at stake, and the reserve proponents were aware of this. In a special meeting of the Tasmanian Field Naturalists Club in the Hobart Museum, called to discuss the reserve proposal, Clive Lord drew attention to this issue by stressing the point that there might be opposition to closing up such a large stretch of country.⁹⁴ The Chairman of the SPB also later commented that:

There would be a great deal of opposition, because people desired to go on the land, for prospecting, and mining was an important industry.⁹⁵

Although largely the concern of the mining industry and the government, there is some evidence to suggest that members of the public were also expressing worries about the question of mining in the proposed reserve. In a letter to the Editor of the *Mercury*, a Mr Luke Williams of Hobart, wrote:

I would suggest to the members for Darwin, our newspaper editors, the Minister for Mines, and to all our mining men, that no restrictions

whatever be allowed to be placed on prospectors or mining, or on minerals of any kind. Our old mining fields need reviving, and new ones opened free from outside control.⁹⁶

While Mr Williams was opposed to the national park, on grounds of limits to mining, there is no evidence to suggest that this was a widespread public concern. On the contrary, lectures and lantern slide shows held in the north, north-west and south of the State to promote the reserve, were received enthusiastically by the public. At an illustrated lecture held in Ulverstone in 1921, for example, there was "spontaneous and generous applause" from the audience after each slide.⁹⁷

The novelty of the lantern slide show no doubt contributed to this response. The pictures displayed included those of the well known professional Tasmanian photographers, Beattie and Spurling, whose work displayed considerable artistry and appeal. However, hearty applause and unanimous support were also expressed at the conclusion of the meeting, when it was moved that the area should be reserved. Similar responses were generated in other centres, including Burnie and Launceston.⁹⁸

It is difficult to judge the extent of public opposition or support for the national park proposal. Arguably, those drawn to the lectures may have been those most interested in the idea, and least in need of convincing. However, what is certain, is that while offering some support, the public did not play a major role in either actively promoting the reserve or opposing its establishment.

The potential of the area for generating revenue from mining was playing on the minds of those in power, even down to the level of local politics. At a meeting of the Kentish Council (covering the Cradle Mountain area), various Councillors raised concerns about mineral deposits in the area, which were thought to hold the possibility of "great wealth". Although the Council voted unanimously in favour of the national park, the financial interests of those utilising resources in the area were not ignored:

There were two or three with interests there, and he [Councillor Quaile] thought these should be compensated or there would be trouble in the future. The scheme should be placed on a proper footing.⁹⁹

The question of mining was not the only ground on which arguments against the proposed Cradle Mountain reserve were raised. Access to timber resources was also under threat. Although a large part of the area was clothed in alpine vegetation, the lower flanks of mountains did support harvestable timber and did have a history of use. The highly valued King Billy pine also grew in higher altitude areas. Various timber leases were being worked in the Cradle Valley at the time of the reserve proposal.¹⁰⁰

Ironically, even Gustav Weindorfer, who initiated the reserve proposal, had undertaken some timber cutting as a source of finances. He and Smith, who also held a property in Cradle Valley, entered a joint contract with Burnie timber-merchants Hodgman, Rockliffe and Causby in 1921, to sell all the marketable timbers on their land, including King Billy pine. However, timber prices slumped and the contract was cancelled in 1921, with no work having been undertaken.¹⁰¹

Weindorfer was also involved in hunting game around the Cradle area, and even had plans to export skins to Austria and Germany, but these were thwarted by the First World War.¹⁰² Game hunting, largely for fur, was undertaken extensively throughout the area of the proposed reserve, and had resulted in diminishing fauna populations. The fire-stick, used by coal prospectors, was also the tool of the hunter, in this case, to promote the growth of 'green pick' and encourage native grazing.

Individuals made their living through pelts, and game was a source of food, particularly for those isolated by virtue of their occupations. Some in society also engaged in hunting as a sport. To declare the area a national park would be to deny access to game, for many a right that had until now gone unchallenged.

There is no solid evidence to suggest that those individuals and small groups engaged in hunting, timber extraction and prospecting in the Cradle Mountain area were actively opposing the reserve idea. Their energies were directed towards making a living in the often harsh mountainous environment in which they worked. Regardless of their levels of knowledge or interest, the mediums of debate were town-based, and thus far removed from their every-day spheres of activity.

In July 1921, Weindorfer, Emmett and Lord waited on the Minister for Lands (Alec Hean) with a proposal to reserve an area of approximately five miles in width, embracing the mountainous country from Cradle Mountain in the north to Lake St Clair in the south.¹⁰³ This area was shaped by knowledge of opposition to the reservation, particularly on grounds of mining and timber extraction. It encompassed only a narrow strip of high altitude land (approximately five miles wide and twenty miles long), which was pointed out to the Minister to be of practically no use for anything but scenic purposes - there was no good grazing country and little in the way of marketable timber. To further appease the Government, it was recommended that the area not be reserved in the same way as Mt Field, as it would be subject to tight regulations. The *Mercury* reported:

What they desired was to have an area from which the game could be taken moderately, timber marketed, and any minerals mined from which they could derive revenue, and there was no intention of locking the place up as was done in the case of the present National Park on the Mt Field Range.¹⁰⁴

That the reserve would not become a financial burden on the Government was argued through some novel approaches, which seem far removed from concepts of nature and scenery preservation:

Certain species such as red deer, chamois, etc., might be introduced in order to make the area a Mecca for the sporting tourist. The streams and lakes could be stocked with fish. The forestry exports could clothe the barren hillsides with spruce and other northern conifers, which should do well in such an area. Properly managed, the reserve in a

very short time could be made directly self-supporting, as well as being of immense indirect financial benefit to the State in general.¹⁰⁵

A Ministerial visit was made to the area, whereupon the Ministers expressed favour to the reserve idea, but needed time to consider how this should be achieved. A delegation including members of the SPB and parties from Hobart and Launceston visited 'Waldheim' in January 1922.¹⁰⁶ By this time there was considerable support for the reserve. However, there were still doubts as to whether such a large area should be 'locked-up' under the Scenery Preservation Act. The suggestion was raised that the provisions of the Act should be made more elastic, so that the area would not be excluded from mining, forestry or grazing purposes.¹⁰⁷ The Chairman of the SPB (Counsel) endorsed this idea, and so it seems did the reserve proponents, who were keen to see the reservation enacted.

In 1921, the Government passed an amendment to the SPA, to bring about the modifications required for the proposed Cradle Mountain reserve.¹⁰⁸ Section 10 of the SPA of 1915 now allowed the Governor, on the recommendation of the Board to exempt any land reserved under the Act from any specified provisions of the Act, and to revoke, wholly or in part, any proclamation.¹⁰⁹ The way was open for revocations and the intrusion of developmental activities that could operate against the permanent protection of nature, afforded through the original Act.

With the amendment in place, the alpine plateau from Cradle Mountain to Lake St Clair was declared a 158 000 acre (63 943 hectare) national park (Scenic Reserve) on 16 May 1922. However, this was not without a price - only six years after the passing of the SPA, the very basis of its institution - for the permanent protection of nature, had been eroded.

Reserve extensions

An examination of the southern boundary-line of Mt Field National Park, during an exploration trip by members of the National Park Board in 1919, revealed that an extension of the reserve was desirable in order

to embrace the remainder of the Mt Field plateau. The extra area was considered necessary to incorporate several additional beauty spots and facilitate the preservation of native fauna. With no opposition, an extension of 11 400 acres (4 650 hectares) was made to the south of the reserve in 1919.¹¹⁰

Concerns over game hunting and the need to fix boundaries on the ground, so that hunters were more aware of the limits to their activities and rangers could act on boundary transgressions, sparked proposals to further extend Mt Field National Park and greatly expand the Cradle Mountain reserve.¹¹¹ In the case of Mt Field, the proposal was readily adopted, and 3 400 acres (1 376 hectares) was added along the northern boundary of reserve in 1930, bringing the reserve to a total of 41 800 acres (16 916 hectares) - Figure 2.2. However, there was resistance to extending the Cradle Mountain reserve.

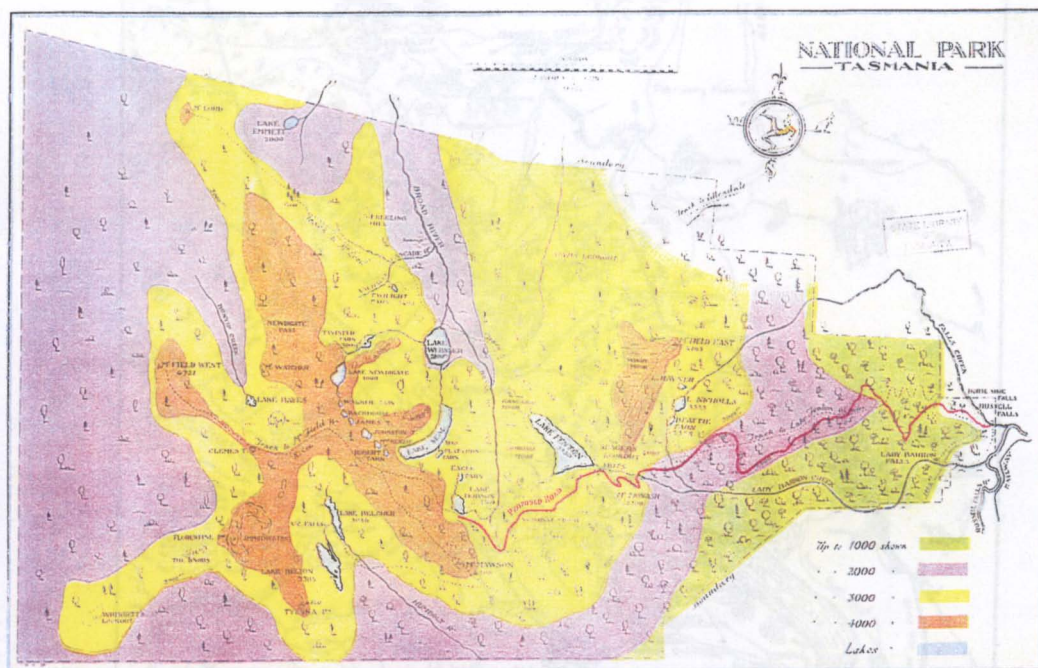


Figure 2.2: Mt Field National Park c1930. Source: Tasmanian Government Tourist Bureaux (undated). *National Park Tasmania*. Tasmanian Government Tourist Bureaux, Hobart and Launceston (brochure).

In 1928, the Cradle Mountain reserve was proclaimed a wildlife sanctuary under the Animals and Birds Protection Act of 1928. The boundaries of the fauna sanctuary were extended in 1934, to conform with natural features, for the benefit of snarers and rangers. The SPB attempted to adopt the enlarged boundary, but met with resistance from forestry and mining interests.¹¹² The new boundary was eventually proclaimed under the SPA in 1936, and resulted in the reserve being doubled in size, from 158 000 acres (63 943 hectares) to 308 000 acres (124 648 hectares) - Figure 2.3.

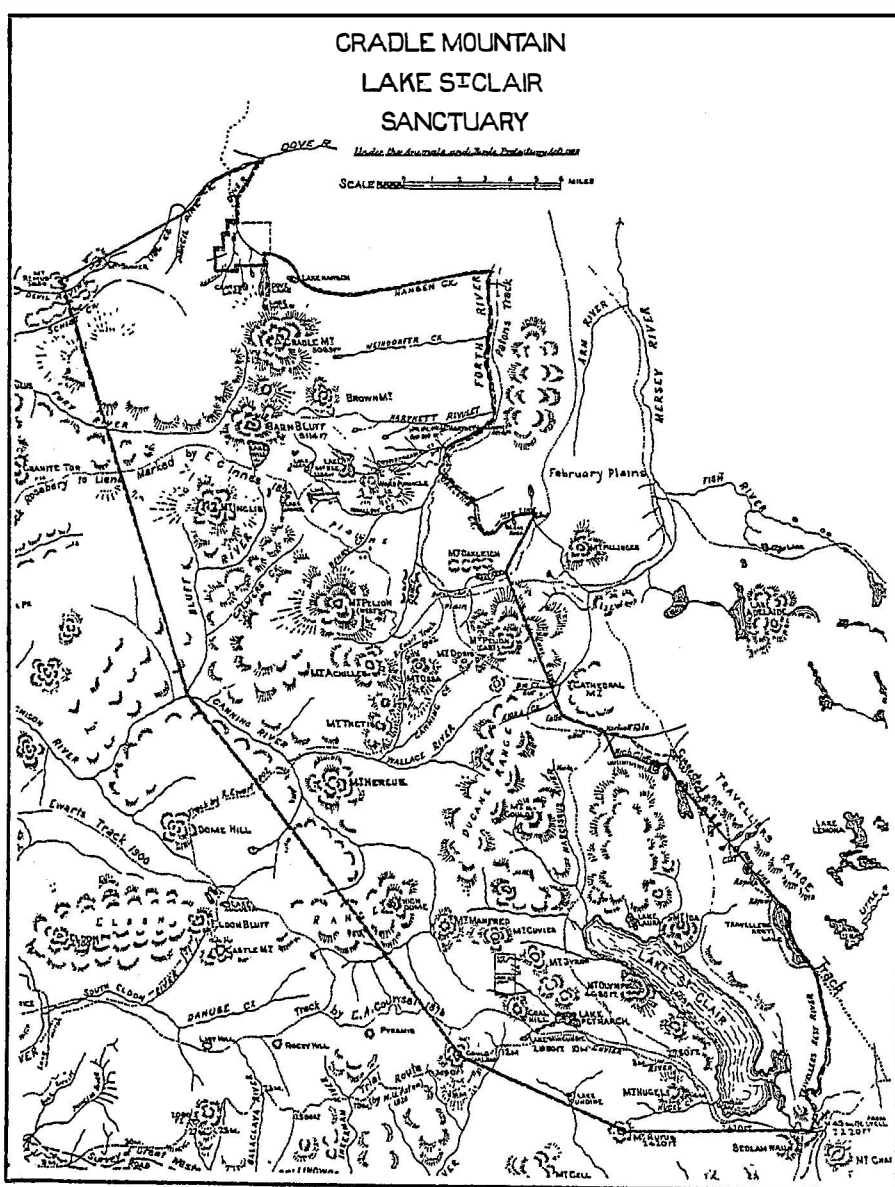


Figure 2.3: Cradle Mountain - Lake St Clair National Park, c1936. Source: National Park Board (undated), Archives Office of Tasmania.

Subject to the Minister, the SPB effectively had authority over all reserves proclaimed under the SPA. The Board could vest control of a reserve in a municipal council or specially constituted authority. Administration of the national park at Mt Field was placed in the hands of the National Park Board, established in 1919. The geographical stretch encompassed by the Cradle Mountain - Lake St Clair National Park, and its different character, raised questions over responsibility for its administration. It was decided that a separate board (the Cradle Mountain Board) would be established to administer the northern half of the reserve, while the southern half was to come under the jurisdiction of the National Park Board. Yet another subsidiary board was responsible for the Freycinet Peninsula.

Discussion

By the end of the early period (1937), Tasmania had three large national parks (although only Mt Field was called a national park at the time), and a number of smaller reserves of natural features, notably mountains, caves and waterfalls (Table 2.2, Figure 2.4). National parks comprised 99.4 per cent of the total area reserved in 1937 and small reserves 0.6 per cent. Most of the reservation activity took place during the years 1916-1922, with most significant additions being extensions to Mt Field and Cradle Mountain - Lake St Clair National Parks in the 1930s.

The dominant motives for the development of early national parks in Tasmania appear to have been scenery and general nature preservation, tourism and recreation. The scenery preservation motive was closely linked with tourism and recreation themes, which were widely used to promote the creation of national parks. All of the large reserves established during this period were in areas of high scenic attraction. In the case of Mt Field and Cradle Mountain - Lake St Clair National Parks, this comprised rugged high altitude landscapes, with a high diversity of scenically attractive elements, such as peaks, lakes, waterfalls, and interesting flora. Freycinet National Park was

established in a landscape consisting of dramatic granite outcrops, surrounded by the coast.

Table 2.2: National Parks and reserves in Tasmania, 1937.

Reserve	Area (acres)	Area (hectares)
Scenic Reserves (National Parks)		
Mt Field	41 800	16 916
Freycinet Peninsula	18 630	7 541
Cradle Mt-Lake St Clair	308 000	124 648
Coastal Reserves		
Remarkable Cave	150	61
South Bruny Island	600	243
Waterfalls		
St Columba	775	314
Forth	64	26
Marriott's	300	121
Caves		
Hastings	131	53
Gunn's Plains	24	10
Fern Gullies, Forest etc.		
Waterfall Creek	60	24
Total	370 534	149 957

It has been widely proposed that early national parks in Australia were established in scenic landscapes, largely for purposes of recreation and tourism.¹¹³ These same themes have been suggested for early national park development elsewhere in the world, particularly those countries which were among the first to establish large reserves, such as the United States, Canada and New Zealand.¹¹⁴ Utilitarian arguments have certainly played a major role in the promotion of early national parks and have comprised some dominant motives behind reserve proposals.

However, the nature preservation motive has also been highly significant in some national park proposals. In the case of Tasmania, the evidence suggests that general nature preservation was a major motive behind the creation of all national parks during the early period. This motive has been identified in some other early national park proposals in Australia. For example, the Kuring-gai Chase National Park proposal (near Sydney) was initiated in the early 1890s through concerns over extensive picking of native wild flowers, and

the Field Naturalists section of the Royal Society (unsuccessfully) pressed for South Australia's first national park (Belair), established in 1891, to be retained in its natural state.¹¹⁵ However, the significance of the nature preservation motive in early national park debates has been less explored than scenery, tourism and recreation themes.

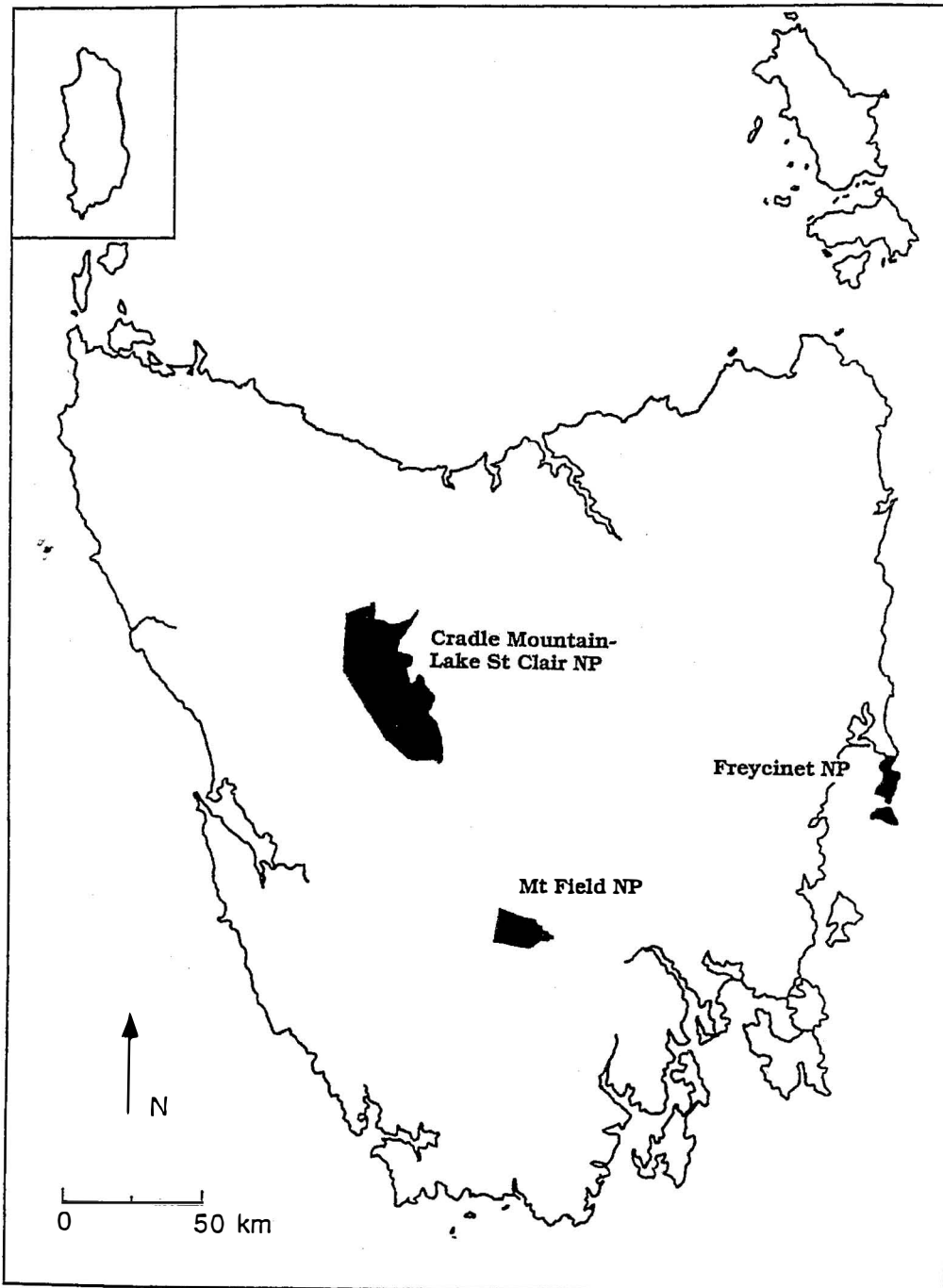


Figure 2.4: National Parks in Tasmania, 1937. NP - National Park.

In all of the national parks debates, the prononents highlighted the worthlessness of the land for economic purposes, and used this argument to back their proposals. The 'worthless lands hypothesis' was first developed in the United States, where it was proposed as an integral part of early national park creation.¹¹⁶ This idea has since been applied to the Australian, Canadian and New Zealand situations.¹¹⁷ The historical evidence presented in this chapter suggests that early Tasmanian national parks were established in areas then considered to be of no economic value, apart from that which could be derived from tourism. In the case of Cradle Mountain - Lake St Clair National Park, this led to the original boundaries of the reserve being formulated to encompass only the highest altitude, most rugged landscapes, and to exclude any areas of potential value. Other studies that have examined different aspects of early national park development in Tasmania have also suggested that early national parks were established in economically worthless areas.¹¹⁸

Those proposing the creation of national parks during this period included scientific and naturalist societies and enthusiastic individuals. In the case of Mt Field National Park, these formed an amalgam known as the National Parks Association, which also gained the support of groups interested in possible financial gains, including railways and tourism associations. While offering some support, the public did not play a role in promoting national park creation during this period. In countries where national parks were established during the late nineteenth and early twentieth centuries, other studies have identified scientific and naturalist societies and individuals as the major national park proponents.¹¹⁹ National Parks Associations were also formed in some other Australian states, where they similarly pushed for the creation of a number of early national parks.¹²⁰

In Tasmania, the government was the major opponent to national park creation during the early period. Opposition was largely on economic grounds. It has been argued that in the early years of the twentieth century, successive Tasmanian Governments opposed national park proposals as they would necessitate ongoing financial commitment.¹²¹ There was also resistance on the basis of natural resources of value potentially being 'locked-up' from utilisation. While no companies or

groups were actively opposing the reserve proposals, it was feared by the government that the potential interests of developers and the State may be threatened. This was particularly the case with the mineral and timber resources around the Cradle Mountain area.

Tasmania's early national parks were thus motivated by scenery and general nature preservation, and opportunities for tourism and recreation. The reserve proponents comprised a small group in society with scientific and natural area interests, and were largely, although not exclusively, urban-based. While there was some public promotion of reserve proposals, the public was not a significant player in national park debates. Most opposition to the creation of early national parks came from the decision makers in government.

ENDNOTES - CHAPTER 2

1. Abstract of proceedings, April 11, 1876. *Papers and Proceedings of the Royal Society of Tasmania*, 1876, p8.
2. *Ibid.*
3. Rodway, L., 1899. Forestry for Tasmania. *Pap. Proc. Roy. Soc. Tasm.*, 1898-1899, liii-xliv.
4. Heyn, W., 1901. Present and future prospects of timber in Tasmania. *Pap. Proc. Roy. Soc. Tasm.*, 1900-1901, 21-37.
5. Castles, G., 1986. Handcuffed Volunteers. A History of the Scenery Preservation Board in Tasmania, 1915-1971. Unpublished Honours Thesis, University of Tasmania.
6. Abstract of proceedings, May, 1875. *Pap. Proc. Roy. Soc. Tasm.*, 1875, p9.
7. Tassell, M. and Wood, D., 1981. *Tasmanian Photographer. From the John Watt Beattie Collection*. The Macmillan Company of Australia Pty Ltd, Melbourne.
8. Robson, L., 1991. *A History of Tasmania, Volume Two*. Oxford University Press, Melbourne.
9. Beattie, J. W., 1908. Notes on the River Gordon and on the need for reservation of land along its banks. *Pap. Proc. Roy. Soc. Tasm.*, 1908, 31-35.
10. Abstract of proceedings, July 13, 1908. *Pap. Proc. Roy. Soc. Tasm.*, 1908, viii-ix.
11. *Ibid.*
12. Flanagan, R., 1985. *A Terrible Beauty. History of the Gordon River Country*. Greenhouse Publications Pty Ltd, Victoria, Australia.
13. Beattie, 1908, *op. cit.*
14. Robson, 1991, *op. cit.*
15. Mosley, G., 1966. Aspects of the Geography of Recreation in Tasmania. Unpublished PhD Thesis, Australian National University, Canberra.
16. Robson, 1991, *op. cit.*
17. *Ibid.*
18. Abstract of proceedings, June 13, 1904. *Pap. Proc. Roy. Soc. Tasm.*, 1903-1905, pxxi.
19. *Ibid.*
20. Abstract of proceedings, August 15, 1906. *Pap. Proc. Roy. Soc. Tasm.*, 1906-1907, pxxxiii.
21. Abstract of proceedings, June 13, 1904. *Pap. Proc. Roy. Soc. Tasm.*, 1903-1905, pxxi.
22. Abstract of proceedings, September 12, 1894. *Pap. Proc. Roy. Soc. Tasm.*, 1894-1895, xvi-xvii.
23. *Ibid.*
24. *The Meredith Papers*. Archives Office of Tasmania.

23. Interview with Jessie Luckman, 10/9/1998.
24. Lord, C. E., 1918. The foundation of the National Park. *Pap. Proc. Roy. Soc. Tasm.*, 1918, 74-75.
25. The Waste Lands Act, 1863 (27 Vict. No. 22). *Tasmanian Acts of Parliament*, 1863-1869.
26. The Crown Lands Act, 1903 (3 Edw. VII No. 39). *Tasmanian Acts of Parliament*, 1903.
27. Reserves for Recreation Grounds etc. *Journals and Printed Papers of Parliament*, 1899, No. 64.
28. The Crown Lands Act, 1911 (2 Geo. V No. 64). *Tasmanian Acts of Parliament*, 1911.
29. Mosley, 1966, *op. cit.*
30. *Ibid.*
31. Castles, 1986, *op. cit.*
32. *Ibid.*
33. Interview with Jessie Luckman, 10/9/1998.
34. *Ibid.*
35. MacPhie, P., 1992. Mt Field. The Evolution of Tasmania's First National Park, 1830-1960. Department of Parks, Wildlife and Heritage, Tasmania (draft only).
36. *Ibid.*
37. *Ibid.*
38. Sharland, M., 1972. *Tasmanian National Parks*. The Mercury, Hobart.
39. The Mercury, 21/10/1913.
40. Serle, G., (Ed.), 1988. *Australian Dictionary of Biography, Volume 11: 1891-1939*. Melbourne University Press.
- MacPhie, 1992, *op. cit.*
41. Nairn, B. and Serle, G., (Eds.), 1986. *Australian Dictionary of Biography, Volume 10: 1891-1939*. Melbourne University Press.
- MacPhie, 1992, *op. cit.*
42. Nairn, B. and Serle, G., (Eds.), 1981. *Australian Dictionary of Biography, Volume 8: 1891-1939*. Melbourne University Press.
- MacPhie, 1992, *op. cit.*
43. MacPhie, 1992, *op. cit.*
44. *Ibid.*
45. Serle, 1988, *op. cit.*
- MacPhie, 1992, *op. cit.*
46. Castles, 1986, *op. cit.*
47. The Mercury, 21/8/1913.
48. The Daily Post, 3/10/1913.

49. *The Mercury*, 22/4/1914.
50. *The Mercury*, 21/10/1913.
51. *The Daily Post*, 3/10/1913.
52. *Ibid.*
53. *Ibid.*
54. *Ibid.*
55. *The Mercury*, 22/4/1914.
56. *Ibid.*
57. *Ibid.*
58. *Ibid.*
59. *Ibid.*
60. The Scenery Preservation Act, 1915 (6 Geo. V No. 15). *Tasmanian Acts of Parliament*, 1915.
61. *The Mercury*, 22/4/1914.
62. *The Mercury*, 15/10/1917.
63. *Ibid.*
64. *Ibid.*
65. Lewis, A. N., 1921. A preliminary sketch of the glacial remains preserved in the National Park of Tasmania. *Pap. Proc. Roy. Soc. Tasm.*, 1922, 17-36.
66. *The Mercury*, 15/10/1917.
67. *Ibid.*
68. MacPhie, 1992, *op. cit.*
69. *Mercury* reprint (April, 1919) in Minute Book of National Park Board, 1917-1927.
70. *Ibid.*
71. Bardwell, S., 1974. The National Park Movement in Victoria. Unpublished PhD Thesis, Monash University, Melbourne.
72. Giordana, M., 1987. *A Man and a Mountain. The Story of Gustav Weindorfer*. Regal Publications, Launceston, Tasmania.
73. *Ibid.*
74. *The Examiner*, 19/8/1909.
75. *The Weekly Courier*, 22/9/1910.
76. *The Weekly Courier*, 29/9/1910.
77. Weindorfer, G., 1910. Two botanists in the Cradle Mountains, Tasmania. *The Victorian Naturalist*, Vol. 28, 216-223.
78. Giordana, 1987, *op. cit.*
79. *The Examiner*, 4/11/1936.
80. Giordana, 1987, *op. cit.*

77. *The Examiner*, 12/7/1921.
78. Giordana, 1987, *op. cit.*
- Branagan, J. G., 1984. *A Great Tasmanian. Frederick Smithies, O.B.E.* Royal Press, Launceston, Tasmania.
79. Giordana, 1987, *op. cit.*
80. *The Examiner*, 16/7/1921.
81. *The Advocate*, 5/8/1921.
82. *The Mercury*, 5/1/1922.
83. *Ibid.*
84. *The Examiner*, 16/7/1921.
85. *The Advocate*, 5/8/1921.
86. *Ibid.*
87. *The Mercury*, 5/1/1922.
88. *The Examiner*, 12/7/1921.
89. *The Examiner*, 30/3/1922
90. *The Examiner*, 16/7/1921.
91. *The Examiner*, 12/7/1921, 16/7/1921.
The Mercury, 26/7/1921.
92. Lawrence, M. J., 1979. *Environmental Impact Statement for Oakleigh Creek Wolframite Project.* Central Tasmanian Tungsten Pty Ltd.
93. *The Advocate*, 6/7/1921.
94. *The Mercury*, 26/7/1921.
95. *The Examiner*, 30/3/1922.
96. *The Mercury*, 27/7/1921.
97. *The Advocate*, 12/8/1921.
98. *Ibid.*
99. *The Advocate*, 8/8/1921.
100. *The Advocate*, 8/3/1921.
101. Bergman, G. F. J., 1959. *Gustav Weindorfer of Cradle Mountain.* Mercury Press, Hobart, Tasmania.
102. *Ibid.*
103. *The Mercury*, 23/7/1921.
104. *The Mercury*, 26/7/1921.
105. *The Mercury*, 30/7/1921.
106. *The Examiner*, 30/3/1922.
107. *Ibid.*
108. *Ibid.*

109. An Act to amend the Scenery Preservation Act, 1915 (12 Geo. V No. 29). *Tasmanian Acts of Parliament*, 1921.
110. National Park Board Report for 1918-1919. *Journals and Printed Papers of Parliament*, 1919, No. 14.
111. Mosley, 1966, *op. cit.*
- Cradle Mountain Reserve Board, Minutes of Meetings, 6/3/1934.
112. Mosley, 1966, *op. cit.*
113. Bardwell, 1974, *op. cit.*
- Black, A. and Breckwoldt, R., 1977. Evolution of systems of national park policy-making in Australia. In: Mercer, D., (Ed.), *Leisure and Recreation in Australia*. Sorrett Publishing, Melbourne, 190-199.
- Frawley, K., 1988. The history of conservation and the national park concept in Australia: a state of knowledge review. In: Frawley, K. and Semple, N., (Eds.), *Australia's Ever Changing Forests*. Australian Defence Force Academy, Canberra, 395-417.
- Hall, C. M., 1988. The 'worthless lands hypothesis' and Australia's national parks and reserves. In: Frawley, K. and Semple, N., (Eds.), *Australia's Ever Changing Forests*. Australian Defence Force Academy, Canberra, 441-456.
- Hall, C. M. and Shultis, J., 1991. Railways, tourism and worthless lands: the establishment of national parks in Australia, Canada, New Zealand and the United States. *Australian Canadian Studies*, 8 (2), 57-74.
- Harris, S. and Whinam, J., 1993. Fenced all around - perspectives on the development of nature conservation in Tasmania. In: Moritz, C. and Kikkawa, J., (Eds.), *Conservation Biology in Australia and Oceania*. Surrey Beatty and Sons, Chipping Norton, 327-337.
- Mosley, J. G., 1969. Scenic reserve and fauna sanctuary systems in Tasmania. In: Webb, L. J., Whitelock, D. and Le Gay Brereton, J., (Eds.), *The Last of Lands*. Jacaranda Press, 161-169.
- Turner, A., 1979. National parks in New South Wales, 1979-1979: Participation, Pressure Groups and Policy. Unpublished PhD Thesis, Australian National University, Canberra.
114. Hall and Shultis, 1991, *op. cit.*
- Laurie, M., 1979. A history of aesthetic conservation in California. *Landscape Planning*, 6, 1-49.
- Nash, R., 1982. *Wilderness and the American Mind*. Third Edition. New Haven: Yale University Press.
- Pearce, D. G. and Richez, G., 1987. Antipodean contrasts: national parks in New Zealand and Europe. *New Zealand Geographer*, 43 (2), 53-59.

Runte, A., 1976. The West: wealth, wonderland and wilderness. In: Wreford Watson, J. and O'Riordan, T., (Eds.), *The American Environment: Perceptions and Policy*. John Wiley and Sons, 47-62.

Runte, A., 1979. *National Parks: the American Experience*. Lincoln: The University of Nebraska Press.

115. Bardwell, 1974, *op. cit.*

Black and Breckwoldt, 1977, *op. cit.*

Mosley, G., 1978. A history of the wilderness reserve idea in Australia. In: Mosley, G., (Ed.), *Australia's Wilderness Conservation Progress and Plans*. Australian Conservation Foundation, Melbourne, 27-33.

116. Runte, 1979, *op. cit.*

Runte, 1976, *op. cit.*

117. Hall, 1988, *op. cit.*

Hall and Shultis, 1991, *op. cit.*

118. Castles, 1986, *op. cit.*

Harris and Whinam, 1993, *op. cit.*

Mosley, 1969, *op. cit.*

Mosley, 1966, *op. cit.*

119. Hall and Shultis, 1991, *op. cit.*

Laurie, 1979, *op. cit.*

Nash, 1982, *op. cit.*

Pearce and Richez, 1987, *op. cit.*

Runte, 1979, *op. cit.*

Runte, 1976, *op. cit.*

120. Bardwell, 1974, *op. cit.*

Frawley, 1988, *op. cit.*

121. Castles, 1986, *op. cit.*

CHAPTER 3

Roads, Hounds and Dams

(The Middle Period: 1938-1970)

After a long period of stasis, there was a phase of growth in the reserve system beginning in the late 1930s. During the 1920s and 1930s, the Scenery Preservation Board (SPB) had scant financial resources to manage the reserves under its control and the preservation of the natural environment took a low priority against pressing social and economic issues heightened by the Great Depression. However, as Tasmania began to emerge from the worst years of the depression, policies implemented by the Labor Government led by Premier Ogilvie and changes in the membership of the SPB brought renewed interest in the creation of reserves.

Ogilvie instituted a works program that involved the large scale construction of new roads around the State.¹ The injection of funds into public works was primarily designed to generate employment, but also brought new opportunities for the expansion of the State's natural resource based industries, typically forestry, mining and hydro-electric developments. It was during this period that the pinnacle road to Mt Wellington and a link road between the east and west coasts of the State were built.

Expansion of the Reserve System

Hartz Mountains

Included in the public works program was the allocation of approximately £30 000 for the construction of a road to Hartz Mountains in the far south-east of the State.² The rugged alpine peaks, lakes and forested slopes of Hartz Mountains were well known for their

scenic majesty. During the early decades of the century, the area had featured among Beattie's photographic depictions of the State's natural scenic attractions (Plate 3.1).



Plate 3.1: Hartz Mountain and Lake Emily. Photographer: John Watt Beattie. Source: The Beattie Studio (private collection).

In 1938, a proposal was made to the SPB by the Public Works Department that the Hartz Mountains area be proclaimed a scenic reserve.³ The SPB agreed that in view of the fact that £30 000 was being expended on the Hartz Mountains road and that this would open up a scenic asset, the area should be reserved.⁴

Colin Pitt (Chairman of the SPB, Secretary for Lands and Surveyor-General) met with Allan Knight (Director of Public Works) and a representative of the Forestry Department to discuss the matter. All

parties had interests in the creation of a scenic reserve at Hartz Mountains at this time. The proposed reserve encompassed largely high altitude mountainous territory and the Hartz road would vastly improve access for the Forestry Department to southern forest resources.

Government expenditure on the road provided an opportunity for the SPB to secure a scenic reserve, with little outlay from its own limited resources. However, Pitt also harboured some concerns about the potential damage to natural values that could result from opening up the area. He recommended to the Director of Public Works that before the construction of the Hartz Mountains road proceeded, an area of approximately 20 000 acres (8 094 hectares) at the terminus of the road including Hartz Mountains peaks and lakes, be reserved, and in addition, 20 chains (400 metres) on either side of the road.⁵ The roadside reserve was included as Pitt was aware of the common practice of timber cutters of leaving fires burning, which frequently led to widespread damage to forests and scenery.

The Public Works Department had an obvious interest in the proposal as it was likely to secure continued funding for the road. The Hartz Mountains area was promoted through the press as a tourist attraction awaiting development. A Special Correspondent to the *Mercury* wrote of the area:

In lavishness of scenic attraction the Hartz makes a particular appeal to tourists, with its extensive and beautiful stretches of plain, its rugged escarpments, and hidden lakes. At present, however, it is accessible only by pack-horse or by foot. It is an area calling loudly for development.⁶

With no apparent objections to the reservation, the Hartz Mountains National Park was proclaimed in May, 1939, with boundaries following those recommended by Pitt. However, on June 10, 1939, Premier Ogilvie collapsed and died suddenly in Melbourne, leaving the future of his public works plans, including the Hartz road, uncertain. Considerable debate took place in the Legislative Council in which opponents to the road described it as a "road to nowhere" and a waste of

money. In reply, Dr Lewis, supporter of earlier reserve proposals in the State, said that, "...if the Hartz road leads to nowhere, then nowhere is an amazingly attractive place".⁷

Lewis attempted to appeal to economic interests by arguing that the Hartz road would provide access to unrealised timber wealth in the Picton Valley and the mineral country beyond, and that Hartz was probably, "...the best pocket collection of tourist attractions in the State".⁸ In an attempt to reconcile the cost of the road, he suggested a toll could be charged per car to make the road pay, and that if completed, tourists would stay longer in the State and spend more money. The road would be "... a rarity, and rarities are fine sources of revenue to the countries that possess them".⁹

The optimism espoused by Lewis was not enough to convince the Government that expenditure of this magnitude was justified. The Legislative Council refused to pass the Bill that would provide for completion of the road. Pitt despondently exclaimed that the Hartz Mountains reserve was now of little value, given there was no likelihood of the road being built.¹⁰ While Pitt did appear to have genuine concerns about scenery and nature preservation, his comment revealed both personal disappointment and a view that reserves were largely perceived at this time as scenic tourist assets, requiring access and development. In the years ahead, completion of the Hartz road remained firmly on the agenda of the SPB, but it was to be an item that ultimately brought the integrity of the reserve under threat.

Roadside and Riparian Reserves

During the 1930s, Pitt and Knight took an interest in rejuvenating the SPB.¹¹ Both were involved in the development of new roads and travelled extensively around the State, witnessing first hand the results of opening access to remote country. Pitt (Plate 3.2) raised concerns about the damage to scenery along these new roads as a result of forestry activities.

These observations sparked Pitt to propose a roadside reserve along the West Coast Road (Lyell Highway). The Forestry Department had

granted timber leases to the Mt Lyell Company adjacent to the road in 1932. The Mt Lyell Company was engaged in extensive timber cutting to fuel the machines of its mining operations, based in the west coast town of Queenstown. Pitt had been drawing attention to the damage along the road from 1933. Fires had swept over large parts of the country and posed a major threat to scenic values.¹²



Plate 3.2: Colin Pitt (Surveyor-General), while working as Chief Engineer on the West Coast Road, 1933. Source: Archives Office of Tasmania.

Through the personal efforts of Pitt, the SPB was able to establish a reserve of 18 000 acres (7 447 hectares) along the Lyell Highway in 1938. Two further roadside reserves were created along the Queenstown-Zeehan Road and the Bass Highway between Smithton and Marrawah, in the north-west.¹³

The SPB also recommended the creation of reserves along the Gordon and Pieman Rivers on Tasmania's west coast. These were large,

accessible rivers of high scenic attraction holding stands of unique Huon pine. The Gordon River had been promoted for reservation by Beattie in the early years of the century, with the backing of the Royal Society (refer to Chapter 2). It was a river of immense scenic beauty offering potential for tourism, but threatened by continued timber extraction. The possibility of reserving these rivers was ultimately made easier by improved access to the west coast, the efforts of Pitt, and the support for tourism by Premier Ogilvie. Riparian reserves were established along the Gordon and Pieman Rivers, of 6 200 acres (2 565 hectares) and 8 215 acres (3 399 hectares) respectively, in 1938.

While there is evidence to suggest that Pitt was genuine in his response to the widespread damage being incurred to the natural environment, the motives behind his reserve proposals are complicated by other agendas. In their aim to revitalise the SPB, Pitt and Knight had interests in increasing the level of government funding allocated to the Board. The SPB was so starved of funds that it had even approved the sale of timber from Mt Field National Park to raise money for park 'improvements'.¹⁵

Pitt and Knight also had interests in the continued development of the state road network through their offices in the Lands and Works Departments, through which membership to the SPB was automatic. However, while their institutional allegiances and personal goals may have provided incentives for the expansion of the reserve system, the appeals made by Pitt for roadside and other reserves provide evidence that scenery and nature preservation were also significant motives. Government support was no doubt aided by the idea that these new reserves would protect scenic resources for the motoring tourist and offer financial rewards.

Mt Barrow

While reserves were being established in the south and west of the State, there was also agitation to develop a scenic reserve in the north-east. In April, 1940, a road that was then the highest in Tasmania was opened to the summit of Mt Barrow (Plate 3.3). The construction of the

Mt Barrow road was a direct result of political pressure put on the government by a sub-committee of the Launceston 50 000 League.¹⁶



Plate 3.3: The opening of the Mt Barrow Road by Major Davies, Minister for Lands, 13 April 1940. Photographer: Fred Smithies. Source: Archives Office of Tasmania.

The object of the Launceston 50 000 League was to advance the growth and prosperity of specifically Launceston and also Tasmania in general

(it is debated whether the 50 000 referred to an aim of increasing greater Launceston's population to 50 000, or for a membership of 50 000). One of the founding members of the League and Chair of the sub-committee responsible for the Mt Barrow Road was Fred Smithies (refer to Chapter 2).¹⁷

The official move to create a scenic reserve at Mt Barrow came from the Tasmanian Government Tourist Bureau.¹⁸ Smithies, who was a member of the SPB and friends with Emmett (Director of the Tasmanian Government Tourist Bureau), was likely to have had a strong hand in supporting this proposal, backed by the Launceston 50 000 League. The SPB had made some earlier attempts to establish a reserve at Mt Barrow, but these were resisted by local game hunters. However, with a new road, tourists could now reach the summit with ease "...and thus be provided with a view equal to that from Mt Wellington."¹⁹

While Mt Barrow was promoted solely as a tourist destination, offering impressive scenic vistas, its proposed reservation may have also been related to an historical context of north-south rivalry. At this time, the distribution of reserves favoured the south of the State. The reference to Mt Wellington by Emmett, the efforts of Smithies and the Launceston 50 000 League (which was largely concerned with development in the north), and the support of the northern-based Tourist Bureau are also suggestive of a desire to address this imbalance by promoting reserves in the north. With the backing of interested authorities, claiming the benefits of this reserve for tourism, and the influence of Smithies on the Board, Mt Barrow was proclaimed a Scenic Reserve of 1 134 acres (469 hectares) in 1940.

Frenchmans Cap

Not all reserve proposals came either directly or indirectly from the SPB or other interested authorities during this period. In July 1940, the SPB received a letter from a dairy farmer, Ray Livingston, requesting that a reserve be established at Frenchmans Cap in Tasmania's wild and mountainous west.²⁰ The Livingston brothers operated a dairy farm in the Hobart suburb of Sandy Bay and this seemingly odd source for a

reserve proposal stemmed from Ray Livingston's keen interest in bushwalking. His appeal for the protection of Frenchmans Cap was motivated by the extensive landscape devastation he had witnessed in the area. The immense scenic beauty and native vegetation around the Cap were being destroyed by fires deliberately lit by hunters.²¹

In support of his reserve proposal, Livingston offered to make a considerable contribution towards construction of a hut on the Cap at Lake Tahune to accommodate bushwalkers. This generous offer did not influence the SPB, which was initially opposed to the Frenchmans Cap reserve idea due to the inaccessibility of the area. However, Livingston's proposal sparked the Board to request Government funding for cutting a track to the Cap from the existing Jane River track. If funding was forthcoming, the Board resolved to consider proclaiming the area a scenic reserve.²² Some of the members of the SPB, including Knight, Pitt and Smithies, were personally aware of the scenic attractiveness of Frenchmans Cap, which was visible from the new West Coast Road. Smithies was among the first to ascend Frenchmans Cap, making an unsuccessful attempt in 1928 and a second in 1931 when he reached the summit (Plate 3.4).²³ While Ministerial approval was sought for track funding, Livingston continued to put pressure on the Board.

Early in 1941, the Board was granted £100 for track works and a sub-committee was appointed to recommend boundaries for the Frenchmans Cap reserve. The SPB approved the recommendations and area of 23 600 acres (9 550 hectares) centred around the Cap was reserved in May, 1941 (Frenchmans Cap National Park). Interest in creating this national park was stimulated by an individual with a personal interest in the natural environment and was motivated by the landscape damage incurred at the hands of hunters. Tragically while preparing for a trip, Livingston was kicked by his horse and killed only one year after the reserve was proclaimed. His ashes were spread on top of Frenchmans Cap and the hut at Lake Tahune, later completed by the Hobart Walking Club, was named 'The Livingston Hut'.²⁴

In 1951, the Deputy Surveyor-General suggested a considerable southerly extension to the reserve (15 000 acres) to conform with

natural boundaries.²⁵ However, the Mines Department objected, and only a small addition was made along the eastern boundary to conform with the Loddon and South Loddon Rivers.²⁶ This increased the area of Frenchmans Cap National Park to 25 240 acres (10 215 hectares) - Figure 3.1.



Plate 3.4: Frenchmans Cap (top right). Fred Smithies expedition. Source: Archives Office of Tasmania.

Ben Lomond

After a burst of activity during the late 1930s/early 1940s, there was little growth in the reserve system until the post-war years. The economic and moral obligations of a nation at war took centre stage. Even the SPB made a contribution to the war effort. Timber siezed by police from a man caught felling trees in Cradle Mountain - Lake St Clair National Park was donated by the Board for patriotic purposes, such as making crutches.²⁷

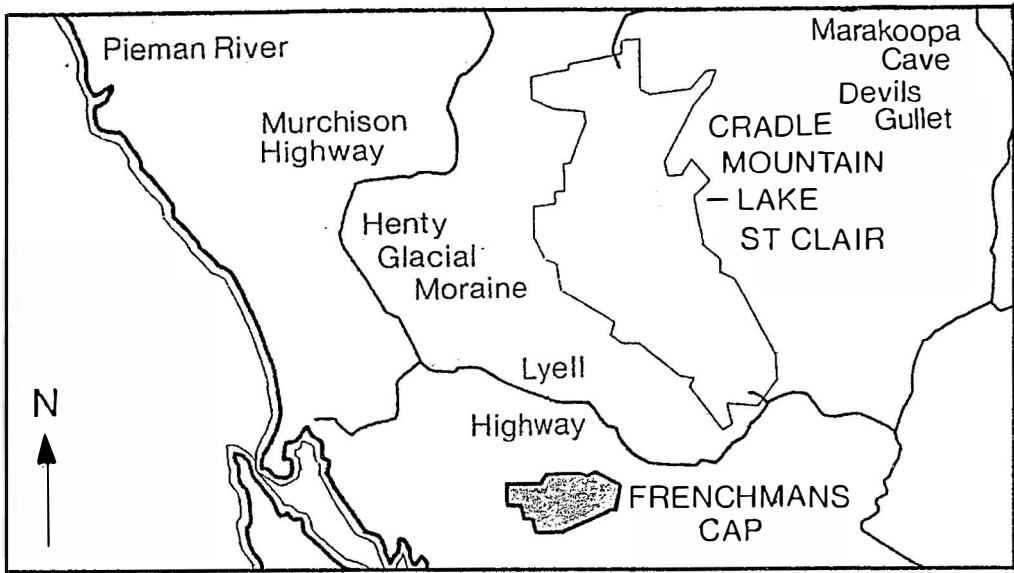


Figure 3.1: Frenchmans Cap National Park. Source: National Parks and Wildlife Service, c1970. *Tasmania's National Parks and Historic Sites*. National Parks and Wildlife Service, Tasmania (brochure).

In the post-war years, there was renewed interest in outdoor recreational activities, the popularity of which had been steadily growing throughout the century. Amongst these, Tasmania's alpine environments offered opportunities for the pursuit of winter sports. Prior to the Second World War, the State's only accessible and developed snowfields were in Mt Field National Park (Plate 3.5). However, there was also strong interest in the development of skiing in the north of the State, organised through the Northern Tasmanian Alpine Club, established in 1929. Smithies was among those instrumental in the formation of this club, an action which is thought to have been linked with the Launceston 50 000 League.²⁸

The Alpine Club investigated a number of areas in the north of the State for their potential for the development of winter sports, principally areas in the Western Tiers. However, the alpine plateau of Ben Lomond in the north-east was ultimately chosen as the most

suitable site to establish ski fields, partly due to its proximity to Launceston. During the 1930s, members of the Alpine Club devoted much of their time and energy into developing the plateau, including the provision of huts for accommodation and beginning the construction of an access road. All of this work was done voluntarily and much of it by hand.²⁹



Plate 3.5: Skiing party, Mt Field National Park. Photographer: John Watt Beattie. Source: The Beattie Studio (private collection).

With the area partially developed by the Club, the SPB became interested in Ben Lomond as a possible tourist resort. In 1946, the Board proposed that the area be proclaimed a large scenic reserve and plans were submitted to the Northern Tasmanian Alpine Club for comment. The proposed boundaries of the reserve would follow those of the fauna reserve previously established under the Animals and Birds Protection Act.³⁰

The Alpine Club was adamantly opposed to the proposal, considering it neither necessary nor desirable. In its reply to the SPB, the Club voiced objections to the reserve on grounds that appear in contradiction to the known interests in reserve creation of some of its members, principally Smithies. The Club wrote:

The main attractions (above the tree-line) are, in winter, the beauty of the extensive snowfields and the excellent ski-ing conditions, and, in summer, the wide distant views, the lakes near the southern end, and the great cliffs that buttress the mountain. All of these are indestructable.

As regards the lower slopes, it is thought that the open eucalypt forest offers little to warrant its preservation. Moreover, it is understood that there are large areas of potential milling timber which the Forestry Commission intends to open to exploitation. Incidentally, such action might help to provide road access which is really the great need at present...

It is thought, that, if the area were made a Reserve, serious limitations might thereby be imposed on the full development of the mountain as a winter sports resort...Sufficient protection is already afforded by the fact that the whole area, plateau and foothills, is already a Game Sanctuary.³¹

While the Club acknowledged the scenic values of the area, it argued that these did not need protection, was of the opinion that the eucalypt forests were not worthy of preservation, suggested the area was already adequately protected, and appeared to be pandering to the interests of industry. However, what had really emerged was a battle for control over the Ben Lomond skiing fields.

The Alpine Club felt it had a proprietary interest in the Ben Lomond area and did not want it to become a public reserve under the authority of the SPB. Club members had built four huts on the plateau, two of which were owned by the Club and two were privately owned (Plate 3.6). They had an obvious interest in the area and were urging its further development as a winter sports resort. They called for public

investment in accommodation, which was then not enough to satisfy demand, and most importantly, provision of road access. The Club was of the opinion that proclaiming the area a scenic reserve would hinder its development, and given the financial records of the SPB, this was a salient argument.



Plate 3.6: Members of the Northern Tasmanian Alpine Club at 'Carr Villa' - hut on Ben Lomond, 1937. Photographer: John Watt Beattie. Source: Archives Office of Tasmania.

The SPB did not accept the views of the Alpine Club, although it is likely that not all members were in agreement. Smithies, for example, was an active member of the Alpine Club, and may have felt compromised on this issue in his position on the SPB. Nevertheless, the SPB proceeded with having the whole area proclaimed a large scenic reserve (Ben Lomond National Park) of 39 615 acres (16 390 hectares) in 1947. A new subsidiary Board (the Northern Scenery Preservation Board) was created to administer this and other northern reserves, on which the Northern Tasmanian Alpine Club was to be represented.³²

Lake Pedder and the South-West

After the creation of the Ben Lomond reserve, the activities of the SPB again fell into a period of stasis. In the post-war growth years there was significant State investment in the development of natural resource based industries. The Hydro-Electric Commission (HEC) was investigating possibilities of damming many of the State's rivers, and the Government was offering subsidised energy to encourage the industrial development of the State.³³ At the same time, social changes were resulting in more available leisure time and the increased use of the automobile meant that more people were engaging in outdoor recreation. The scenic attractions of the State were becoming more widely visited and there were some interested in the creation of new national parks.

In 1954, a proposal was made to the SPB by the Hobart Walking Club for the creation of a reserve around Lake Pedder in Tasmania's south-west.³⁴ Lake Pedder was a large inland lake that boasted a unique and picturesque white sandy beach, surrounded by rugged quartzite mountains (Plate 3.7). The natural beauty of the lake was drawing an increasing number of bushwalkers and the Hobart Walking Club considered that this scenically impressive area should be afforded protection.

To demonstrate the virtues of the area and its suitability for reservation, the Club provided members of the SPB with a slide show presented by member, Lloyd Jones. Accompanying this were proposals for a reserve that would encompass Lake Pedder and be defined by lines joining surrounding mountains (Mt Solitary, Mt Giblin and Mt Sprent).³⁵

In considering the proposal, the SPB raised some concerns about the possibility of future development in the area. It was noted that the HEC had some tentative plans to build a dam near the junction of the Gordon and Serpentine Rivers, which would possibly flood a large part of the valley of the Serpentine, inside the proposed reserve. The Board decided to appoint a sub-committee to investigate the reserve

boundaries suggested by the Hobart Walking Club, and these were submitted to the HEC, Forestry Commission and Mines Department for comment.³⁶



Plate 3.7: Lake Pedder from the Frankland Range. Photographer: Olegas Truchanas. Reproduced with kind permission of Max Angus (President, Olegas Truchanas Publication Committee).

After three alternative boundaries were considered, reports from all consulted parties contained no objections to the reserve. The SPB thus agreed to the proposal and in 1955 a 59 000 acre (24 410 hectare) reserve, named Lake Pedder National Park, was proclaimed (Figure 3.2).³⁷ Although the interests of developers did not appear to be at stake at this time, it was not long before the security of this reserve came under threat.

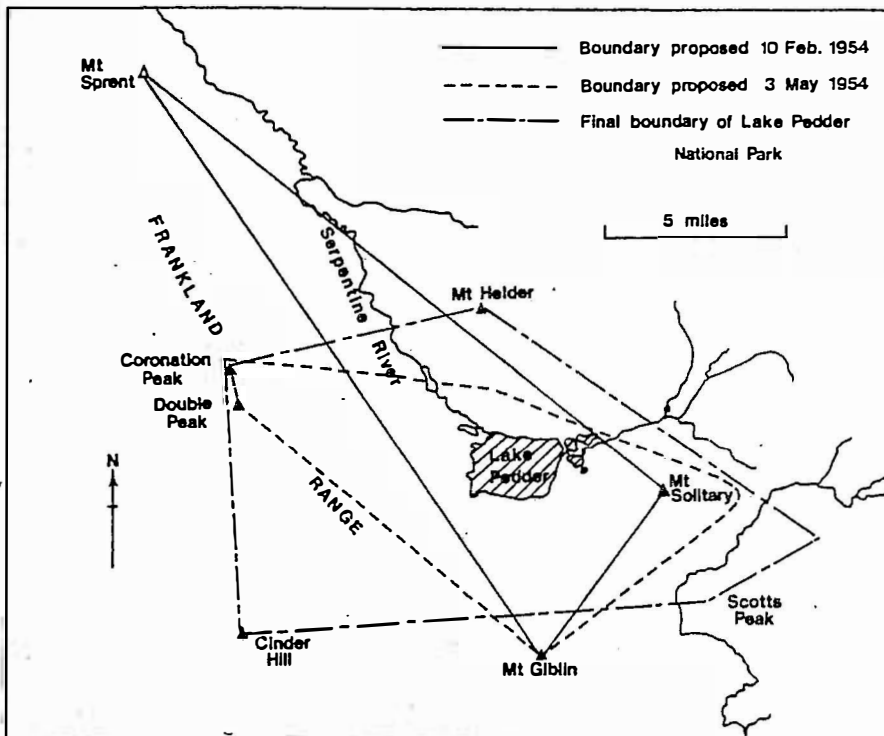


Figure 3.2: Lake Pedder National Park, showing development of boundaries. Source: The Parliament of the Commonwealth of Australia, 1974. *Final Report of the Lake Pedder Committee of Inquiry on the Flooding of Lake Pedder.* Parliamentary Paper No. 104. Government Printer of Australia, p69.

Interest in the south-west of Tasmania was growing and it was becoming a popular area for hardy recreation, particularly amongst those involved in organised bushwalking, such as the Hobart Walking Club. During the 1950s there was also growing concern about the activities of hunters in the south-west of the State. Apart from their destructive practices of burning vegetation to encourage the growth of 'green pick' and attract native grazers, they also used hunting dogs to

assist in the kill. There were increasing reports coming in from bushwalkers and locals from southern towns, such as Geeveston, regarding hounds left abandoned in the wild. Many of the hunters were only interested in the sport of shooting and wallabies and other native game were simply shot and left. The problem was that some of the hounds, once on the scent of their prey, could not be stopped and in several instances hunters had just abandoned them.³⁸

The issue surrounding the hounds was not one of concern for native fauna, but one of concern for cruelty to the hounds. Some members of the Hobart Walking Club, for example, reported sighting an abandoned hound with pups in the vicinity of Blakes Opening that was starving to death. This and other reports of cruelty led to the formation of an organisation known as the Canine Defence League (which later became the Dogs Home of Tasmania), founded by a Miss Rawson of Hobart.³⁹

To prevent further acts of cruelty, the Canine Defence League proposed the creation of a large reserve in south-west Tasmania. Unlike all other previous calls for reserves in the State, this plea was not motivated by a desire for the protection of scenery, nature preservation or tourism, but was seen as a means of restricting hunting, thereby preventing more hounds being abandoned. The efforts of the League brought together a number of other individuals and organisations with varying interests in the possibility of the whole of the south-west becoming a national park. Miss Rawson was very active in the promotion of this idea, delivering lectures to gain the support of other south-west enthusiasts, such as the University Mountaineering Club.⁴⁰

An interesting earlier proposal made to the Premier for a national park in the south-west came from the Country Womens Association (CWA) in 1947. Although the motive for this proposal is difficult to determine, it is possible that members of the CWA were among those concerned about the hunting issue, and that Miss Rawson, who was active in a number of groups, may have encouraged members to write a letter in support of the formation of a reserve in the south-west. Whatever the motives, the proposal from the CWA was dismissed by the SPB at that time.⁴¹

While the issue of hounds brought a focus on the south-west and the efforts of the Canine Defence League brought together interested parties, there were other rumours in the air that gave the South-West National Park proposal increasing momentum. Plans were emerging for a large scale invasion of the south-west, involving developments that would bring the natural integrity of this area under substantial threat.

Initial attempts to reserve the south-west by the Canine Defence League and other groups were met with resistance from the SPB and the Government. The SPB warned that to proclaim such a large area could put it beyond the Board's ability to police and manage it effectively. The Mines and Forestry Departments and the Hydro-Electric Commission (HEC) were consulted on the proposal and all reported to be against the idea.⁴² The Government announced that the South-West National Park idea was desirable in many respects but premature. It was argued that it would involve the State in considerable expenditure and that for a small State, vast areas had already been proclaimed and were being developed steadily. While acknowledging that the protection of game and of the area from fire was of some concern, it was considered that development of the area as a national park would first require road communication to either Port Davey (in the far south-west) or Lake Pedder.⁴³

In arguing that road access was an essential prerequisite for this remote area being proclaimed a national park, the way was being paved for other agendas, principally opening up the land for hydro-electric and other developments. Significant inroads were already being made into the south-west in the early 1960s. In the south, the Government was cutting a track from the Picton River to the Cracroft and the HEC had gained permission from the SPB to erect a hut in Lake Pedder National Park to explore possibilities of generating electricity from the wild rivers of the south-west.⁴⁴

The threats to the south-west were confirmed late in 1962 when the Labor Premier, Eric Reece, announced that the HEC would begin a major programme of investigation into the south-west involving geological and aerial surveys and a tentative scheme for five new lakes for hydro-electric power. This included proposals for a middle Gordon

River power development scheme (Figure 3.3), which would result in the flooding of Lake Pedder. This inland lake comprised the jewel of the existing Lake Pedder National Park, which under the middle Gordon River scheme, would be flooded by an artificial reservoir of around 100 square miles in area.⁴⁵

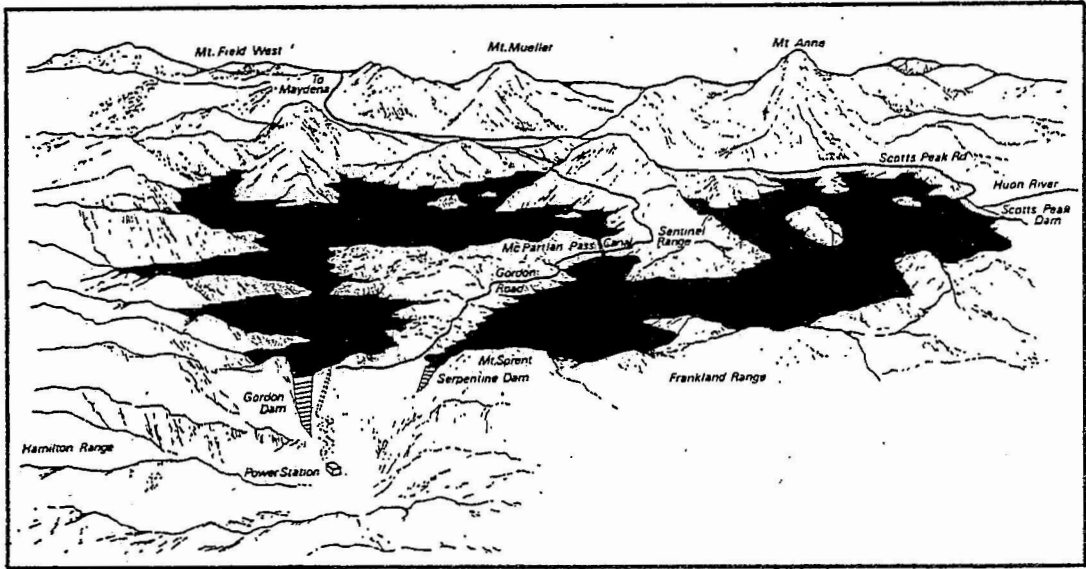


Figure 3.3: The Hydro-Electric Commission's proposed Middle Gordon Power Development Scheme, 1962. Source: The Parliament of the Commonwealth of Australia, 1974. *Final Report of the Lake Pedder Committee of Inquiry on the Flooding of Lake Pedder.* Parliamentary Paper No. 104. Government Printer of Australia, p14.

The realisation of these threats resulted in the rapid formation of a South-West Committee, which was driven not only by the proposed flooding of Lake Pedder but the whole issue of unchecked development in the south-west. The organisations on the South-West Committee represented a wide range of interests and reflected the work of the Canine Defence League. These organisations included: the Aero Club of Southern Tasmania; the Canine Defence League; Hobart Walking Club; Launceston Walking Club; the National Fitness Council of Tasmania; the North-West Walking Club; the Professional Fishermen's Association of Tasmania; Residents of Port Davey; the Society for Growing Australian Plants; the Tasmanian Caverneering Club; the Tasmanian Field Naturalists Club; the Tasmanian University

Mountaineering Club; and the Youth Hostels Association of Tasmania.⁴⁶ The Royal Society for the Prevention of Cruelty to Animals was also involved and one of its members, who was the southern correspondent for the Launceston *Examiner*, became the South-West Committee's 'fly on the wall' in Parliament.⁴⁷

In response, the Government also established its own committee consisting of senior officers in departments concerned with hydro-electric development, mining, forestry and surveying. This Inter-Departmental Committee was charged with developing proposals on the future of the south-west and did not have representatives from the South-West Committee or conservation-oriented groups. It was established by Premier Reece, who had little regard for the concerns of these groups, and was even incensed that a South-West Committee had already been established as he had wished to use the name for his own committee.⁴⁸

During this period, there was growing concern from members of the public about the plan to flood Lake Pedder. Many letters were published in the press in opposition to the proposed hydro-electric developments, and by 1963, it was becoming a major issue of public debate. There was much support for the establishment of a large national park in the south west but also some opposition.

An argument that became central to the south-west debate was the significance of scenery. On the one hand, those opposing developments argued that these would destroy the natural scenic values of the area while, on the other hand, the Government and the HEC argued that the proposed hydro-electric developments would enhance the scenic attractiveness of the area. Both sides shared the view that scenery was an important asset, however, their perceptions of the scenic values of the area diverged considerably.

The Government and the HEC argued that constructing a road into the area was essential to opening up the tourist potential, by making accessible some of the most picturesque areas of the State. The Gordon River Scheme would create five new lakes, which according to Premier Reece, would have no negative impact on the scenery of the area:

The land that will be swamped will be mostly buttongrass plains which now are waste areas, but the high ranges that ring the area and the rugged splendour of the country are certain to become the major tourist attractions of the State.⁴⁹

In fact it was argued by Reece and the HEC Commissioner, Allan Knight, that the whole scenic aspect of the area would be much improved by the scheme. Knight stated,

One thing is certain, it will not affect the scenic beauty of the area to any significant extent...similar hydro developments in the Central Plateau areas had not affected the scenic beauty of the area, rather they had opened them up with first class access roads and the areas were now well known tourist attractions...the areas that would be encompassed by the lakes were for the most part low-lying and swampy buttongrass plains already flooded most of the time...the new lakes would have road access and could eventually become popular with tourists and holiday makers in summer. They would open up large areas which at present were inaccessible.⁵⁰

The South-West Committee also took the scenic line of argument but in the belief that the hydro-electric schemes would destroy natural scenery, which they agreed was of immense value as a tourist asset. These sentiments were also expressed by some in the press, for example, a Special Correspondent to the *Mercury* wrote of the whole scheme, "...a series of lakes as a graveyard to natural beauty is what they will be".⁵¹

While opposition to the scheme mounted, the HEC prepared a case to secure external funding for the construction of the road to Lake Pedder - stage one of the dams scheme. Towards the end of 1963, the Federal Government made available a non-repayable grant of \$5 000 000 to finance the construction of a road from Maydena to the Gordon River in south-west Tasmania.⁵² This road would facilitate hydro-electric surveys and other development-oriented explorations.

The assurances of Reece and Knight that the hydro-electric scheme would not result in the destruction of what they considered to be

natural values, did not carry any weight with the conservationists. The South-West Committee had grave misgivings about the fate of Lake Pedder. By mid-1965, 1 000 constituent members of the Committee were pressing for the retention of the Lake's natural character.⁵³

The South-West Committee embarked on a program of promotion of the south-west as a national park and opposition to the flooding of Lake Pedder. Public support was generated by talks and slide shows that extolled the scenic and natural values of the area. These were shown extensively in Tasmania and other Australian States. Among those of international fame who supported the idea of a large south-west national park were Sir Edmund Hillary and the Duke of Edinburgh.⁵⁴

The efforts of the South-West Committee resulted in 1 600 000 acres (661 980 hectares) of the south-west being declared a Fauna District in 1966, under the Animals and Birds Protection Board.⁵⁵ However, this offered little real protection and was not enough to satisfy the protagonists. In 1966, the South-West Committee made a submission to the Government to create a new national park in the south-west that would be zoned for specific needs. The zones would provide for tourism and particularly for wilderness areas free from development (Figure 3.4).⁵⁶

This was the first time that the preservation of wilderness emerged as an issue of debate in Tasmania and as a significant motive in the arguments for the creation of a reserve. The importance of reserving wilderness was emphasised by speakers at a Science Congress in Hobart in August, 1965. Dr Geoff Mosley of the University of Newcastle, for example, told the Congress that Tasmania was close to losing a unique resource of Australia through the technological invasion of the south-west.⁵⁷ Mosley also argued for wilderness preservation in an article published in the *Tasmanian Tramp* (the journal of the Hobart Walking Club), in which the south-west was promoted as the largest wilderness tract remaining in temperate Australia, in need of protection.⁵⁸

The motives of the South-West Committee for the creation of the national park reflected the range of interests of the organisations represented, and broadly fell into the areas of the conservation of flora,

fauna, scenery, and wilderness, recreation and tourism. Specifically, the principal recommendations in the submission of the South-West Committee to the Government were:

- to establish an Authority with special powers to plan and coordinate the future development of south-west Tasmania, in regard to the interests of all sections of the community;
- for this Authority to establish a master plan for south-west development on a long term basis, and in the meantime, interim protection for the region's scenery and plant and animal life;
- to create a large national park in the south-west, incorporating the Lake Pedder National Park and the small Port Davey reserve;
- to establish zoning within the proposed park of areas specifically for recreation or conservation purposes, and the establishment of wilderness areas for the conservation of habitat to the exclusion of recreation;
- to preserve in a completely natural condition viable samples of all the principal endemic environments of the south-west, and to conserve representative examples of plant and animal life;
- for a critical appraisal of the potential of the south-west as a tourist attraction, including the possibility of the provision of accommodation in certain areas.⁵⁹

Shortly after the submission of the South-West Committee, Reece announced that the Gordon River Scheme would begin within the next twelve months, at a cost of \$300 000 000. The weight of public pressure against the dam was telling on Reece, who was adamant that the scheme would go ahead, stating,

Some people were protesting about the entry of man into the SW corner of the State for developmental purposes. There is one thing that is absolutely certain, there may be some who will protest about progress, but there is no one who can stop it.⁶⁰

The road to Lake Pedder was finished in 1967 and was touted by the HEC and the Government as an essential boon to Tasmanian tourism. Knight said the primary purpose of the road was to provide access to Tasmania's "empty quarter", which had only previously been accessible to hardy bushwalkers. The road would serve not merely in the search

for resources of value to the State, it would open up an area of remarkable scenery hitherto seen by very few.⁶¹ A reporter for the *Examiner* was quite taken with the beauty of the road itself, writing,

A road that changes from blue to brown to pink and green and then to dazzling white, a road that slices through mountains beneath towering forest giants across swampy buttongrass plains. This is the \$5 000 000, 55 mile life line into the SSW, the site of the proposed \$95 000 000 Gordon River power scheme.

I saw where man has braved the rigours of a harsh climate and tortured terrain to carve access for all to this region...red, green and white quartzite have been smashed, pushed and pressed into the most colourful highway imaginable.⁶²

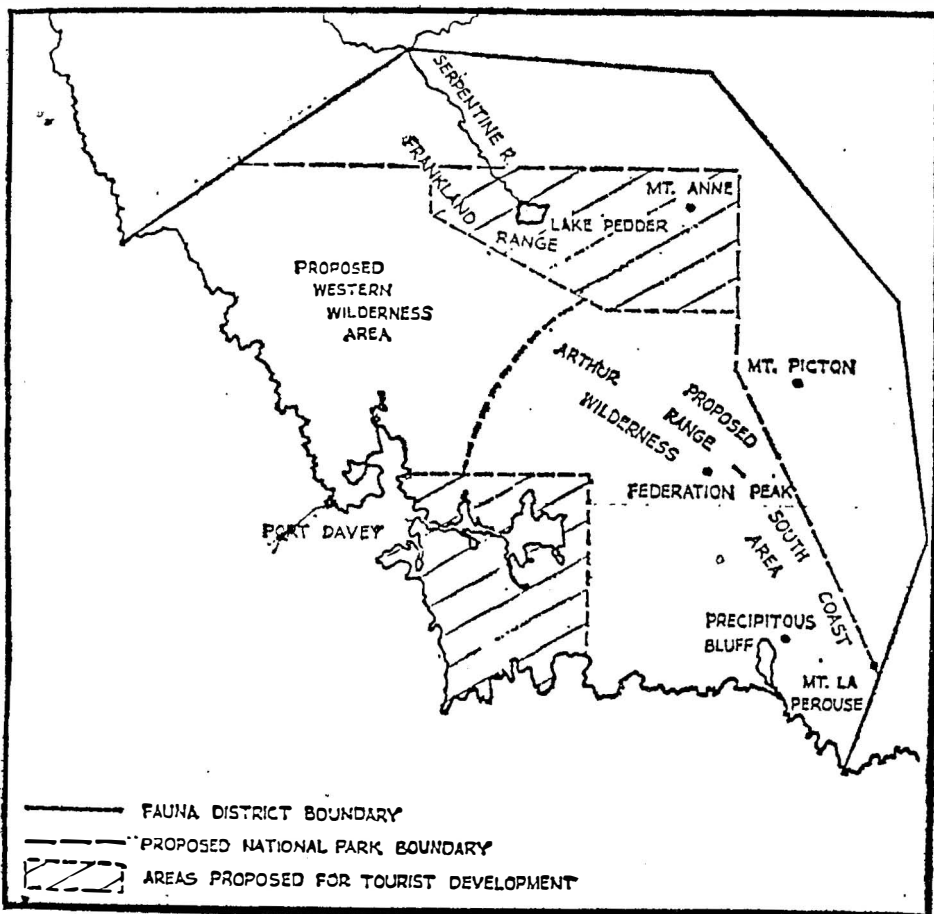


Figure 3.4: The South-West Committee's proposed South-West National Park, 1966. Source: *The Mercury*, 7/9/1966.

The findings of the Inter-Departmental Committee established by Reece, were for the creation of a new scenic reserve in the south-west. However, this would not include Lake Pedder and the HEC wanted proclamation deferred until the first stage of the scheme was complete.⁶³

The South-West Committee was not satisfied with the outcome or whole process. The Committee accused the Government of having a negative and unimaginative attitude towards tourism and called for an independent inquiry or Parliamentary Select Committee to examine the whole question of south-west development, including proposals to flood Lake Pedder. The Committee also urged for complete reconsideration of the boundaries of the new national park in the south-west, as proposed in the reports to Parliament by the Inter-Departmental Committee, and immediate declaration of a suitable area as a national park following the impartial examination of the factors involved by the inquiry.⁶⁴

The proposals for the south-west were considered to fall far short of those of the South-West Committee in its submission to the Government in August, 1966. The most important immediate issue for the Committee was the integrity of the national parks system. It was argued that national parks were selected because they warranted permanent preservation and their alienation should not be contemplated for reasons of short term economic gain. The Committee regarded the wise development of the full tourist potential of the south-west as vital to Tasmania and had stressed this in its submission to the Government.

In the wake of mounting opposition to the scheme, a Select Committee of the Legislative Council was appointed in 1967 to investigate the proposed \$95 000 000 Gordon River power scheme. By the time of the calling for a Select Committee inquiry, there was much public concern over saving Lake Pedder, and a petition was submitted to the Select Committee with 8 500 signatures to save the Lake.⁶⁵

Opposition to the flooding of Lake Pedder also saw the emergence of the Save Lake Pedder Committee. Alternatives mooted by members even included a nuclear power generating station, which they proposed to be a better investment than the Gordon River scheme.⁶⁶ This was an extreme and desperate attempt from a conservation oriented group to save a natural lake. However, the possibility of thermo-nuclear power was even discussed in the Select Committee inquiry. The emergence of the Save Lake Pedder Committee also led to the formation of the Flood Lake Pedder Committee, which was inaugurated in response to the emotional campaign led by their rivals.⁶⁷

While the Select Committee was meeting, Reece introduced a Bill to the House of Assembly to give the HEC almost complete control over 1 600 000 acres of the south-west, the Premier stating, "...the HEC would look after the south-west so that people could not destroy the area's potential".⁶⁸ This is ironic, considering that it was in some peoples' view, the HEC that was posing the greatest threat to the area. Reece argued that an organisation with some ability and authority should be in charge of the area, and in defence of the Gordon River scheme, he stated,

Once the plans of the engineers are implemented it [Lake Pedder] will be replaced by a magnificent inland waterway which will be the largest of its kind in Australia...this will be far more majestic and impressive than a small shallow lake on a buttongrass plain...we must develop more and more of our untapped hydroelectric sources if we are to secure new industries and lift the State's population to the level which will give us a home market and higher living and working standards.⁶⁹

The South-West Committee recommended that a single protection authority, other than the HEC, be created to have control over the south-west. There was concern that to have the HEC in charge would undermine the authority of both the Animals and Birds Protection Board and the SPB, which was in itself considered an unsatisfactory arrangement.

The Legislative Council's Select Committee recommended that Lake Pedder be dammed and a large South-West National Park be created,

with a new body to control and manage national parks in Tasmania.⁷⁰ Although some important areas were not included in the proposed national park, the South-West Committee agreed with the proposal and the new authority, but not with the flooding of Lake Pedder.⁷¹ Although some concessions were made to the Committee, the power of Knight and the HEC, which worked hand in hand with Reece (Plate 3.8) and his Government, was strengthened.

The Gordon River Power scheme was to begin immediately and the HEC was granted interim control over the south-west for approximately one year until the work was completed. In October, 1968, a new Southwest National Park of 473 411 acres (195 867 hectares) was proclaimed (Figure 3.5), which was to fall under the control of the SPB until a new authority was created. The result was clearly a compromise situation. A new National Parks and Wildlife Bill was introduced to Parliament in 1970. However, the South-West National Park and Lake Pedder issues were not yet laid to rest.

Rocky Cape

During the time of the south-west debate, there were also moves to create a coastal reserve in the north-west of the State. In 1963, the Burnie Field Naturalists recommended to the Northern Scenery Preservation Board that an area at Rocky Cape be proclaimed as a scenic reserve.⁷² This area contained the only Tasmanian distribution of Botany Bay banksia (*Banksia serrata*) and examples of other coastal heathland species and communities. The Northern SPB agreed with the proposal, given that agriculturally the land was poor, and suggested that the proclamation could provide a recreational resource that would enhance the value of youth camps in the vicinity.⁷³

The SPB sent the Superintendent of Reserves to inspect the area in 1965 and make recommendations on boundaries. Two areas were suggested for proclamation: one of 7 500 acres (3 035 hectares) between Sisters Beach and Rocky Cape, extending inland for an average depth of two miles; and another of 746 acres (300 hectares) in an area known as the Park Reserve, then under the control of the Wynyard Council. The Park Reserve area was included as it contained fine specimens of

Banksia serrata, the main focus for the reserve proposal, and which the Superintendent of the SPB (erroneously) suggested was as unique in Tasmania as pencil pine (*Athrotaxis selaginoides*) and created much interest outside the State.⁷⁴



Plate 3.8: Premier 'Electric Eric' Reece. Source: *The Mercury*. "What he loved best was travelling around the State on official business and putting on a hard hat as he examined development projects..." Townsley, W. A., 1994. *Tasmania: Microcosm of the Federation or Vassal State, 1945-1983*. St David's Park Publishing, Hobart, Tasmania, p200.

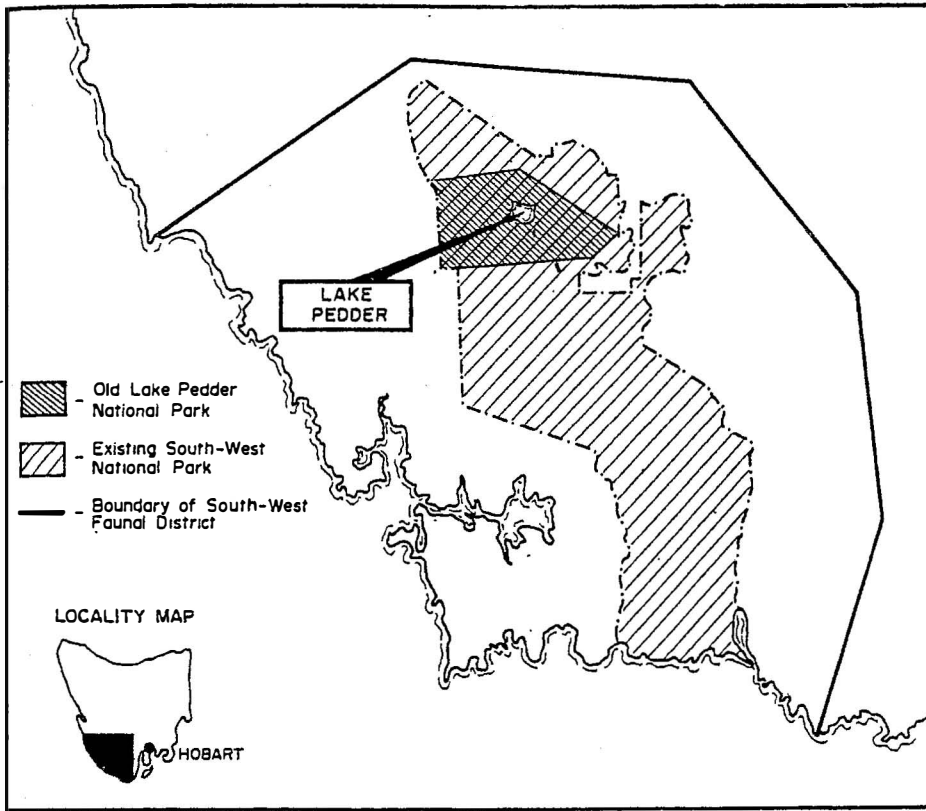


Figure 3.5: Southwest National Park, 1968, showing relationship with old Lake Pedder National Park and the South-West Fauna Reserve.

Source: The Parliament of the Commonwealth of Australia, 1974. *Final Report of the Lake Pedder Committee of Inquiry on the Flooding of Lake Pedder*. Parliamentary Paper No. 104. Government Printer of Australia, p9.

There was some debate amongst members of the SPB about the size of the reserve. One member suggested that the smaller area would be sufficient to reserve the species and it was generally agreed that the proposal was too large. It was pointed out that there were two Aboriginal caves at Rocky Cape and that if only the smaller reserve was proclaimed, these would not be protected. While the larger area was not considered by the Board to be a unique stretch of coastline, it was favoured as it was thought that if left unchecked it would be developed for weekend cottages, known locally as 'shacks'.⁷⁵

There had been some past scientific interest in the Rocky Cape area and a reserve proposal had been made in 1947 to the Northern SPB by a Burnie resident (Mr Jones), before the formation of the Burnie Field

Naturalists Club. The protection of *Banksia serrata* was also the motive behind this proposal. Jones also argued that the area contained barren soil, growing no timber of commercial value and was useless from an agricultural and pastoral point of view.⁷⁶ The Northern SPB was agreeable to this earlier proposal and the matter was referred to the SPB for consideration. However, the item mysteriously disappeared from the agenda of the SPB and did not reappear until the area was again proposed for reservation by the Burnie Field Naturalists in the 1960s.

During the 1960s, there was growing interest in the Aboriginal occupation caves at Rocky Cape. The Queen Victoria Museum in Launceston wrote to the Secretary for Lands (who was also the Chairman of the SPB), claiming that the Aboriginal deposits were of great scientific interest and requesting permission for a group of scientists to excavate. This group included representatives of the National Museum of Victoria, Melbourne University, the University of Tasmania and the Queen Victoria Museum.⁷⁷ The site was also the subject of research for an archaeologist from Sydney University, Rhys Jones, who regarded the caves to be one of the most significant finds to date on the Tasmanian Aboriginal way of life.⁷⁸

With further backing from the Burnie Field Naturalists, the SPB moved to establish a new reserve at Rocky Cape in 1967. However, the original area proposed was reduced in size to a 4 000 acre (1 655 hectare) reserve.⁷⁹ Just why the SPB quibbled over the size of this reserve is uncertain. Perhaps the Wynyard Council wanted to retain some control in the area, or perhaps the Board did not wish to fuel the arguments of the Government regarding the area of the State in reserves. The future of the south-west was a contentious issue at this time and one of the arguments against this national park was that Tasmania already had a proportionally large area of land in reserves, relative to other States. While the area proposed was significantly reduced in size, a new coastal national park was now established at Rocky Cape (Figure 3.6). The national park was later extended during the 1970s and early 1980s to include the Sisters Hill area and freehold 'shack' areas, increasing its size to just over 3 000 hectares.

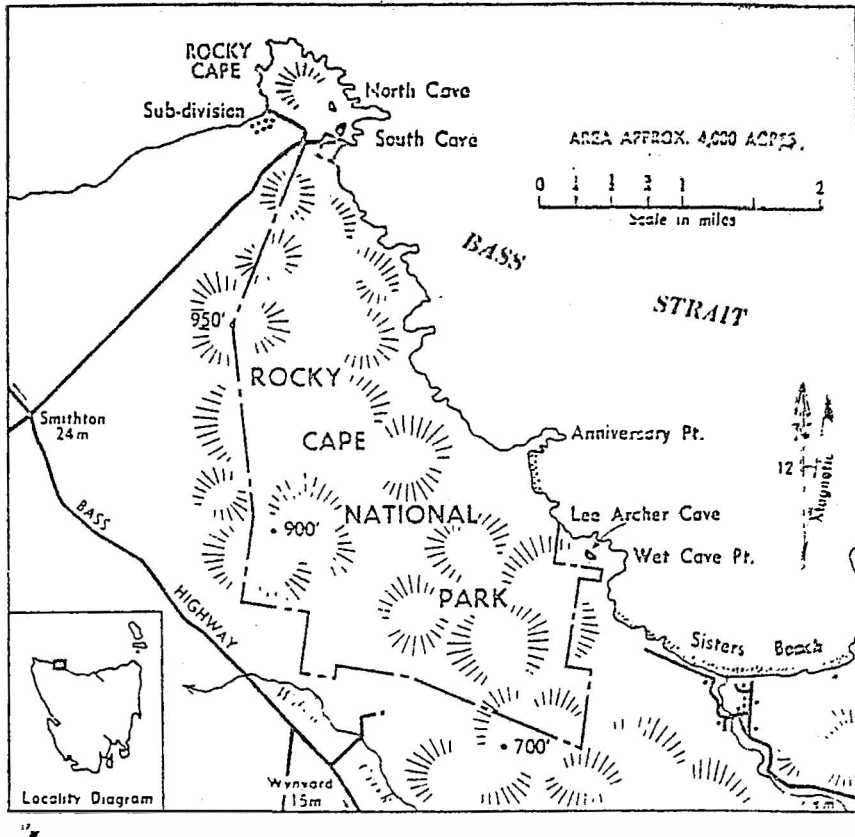


Figure 3.6: Rocky Cape National Park, 1967. Source: Department of Primary Industry, Water and the Environment Library (Pamphlet file - Rocky Cape National Park).

Reserve Revocations

While the period 1938-1970 was one of significant addition to the reserve system, it was also a period of attrition. The reserves established throughout the early and middle periods were largely in areas then considered to be of no other economic value - essentially wastelands. However, reappraisal of these areas led to a series of challenges to the security and integrity of the reserve system, particularly where natural resources of value were concerned. The arbitrary manner in which many of the early reserve boundaries were selected and the limited knowledge of these areas at the time of reservation aided some of these challenges.

Cradle Mountain - Lake St Clair

In the late 1930s, there was renewed interest in the mineral fields near Mt Pelion in Cradle Mountain - Lake St Clair National Park. These had been worked in 1916 and 1919 for copper and wolfram (refer to Chapter 2), but no payable quantities were extracted and operations were brief (Plate 3.9). Murmurs of the possibility of these mines being reopened came to the attention of the Cradle Mountain Board in 1937. The Board expressed concern as these old mines had been included in the reserve when the boundaries were extended to conform with natural features in 1936 (with some protest from the Mines Department).⁸⁰

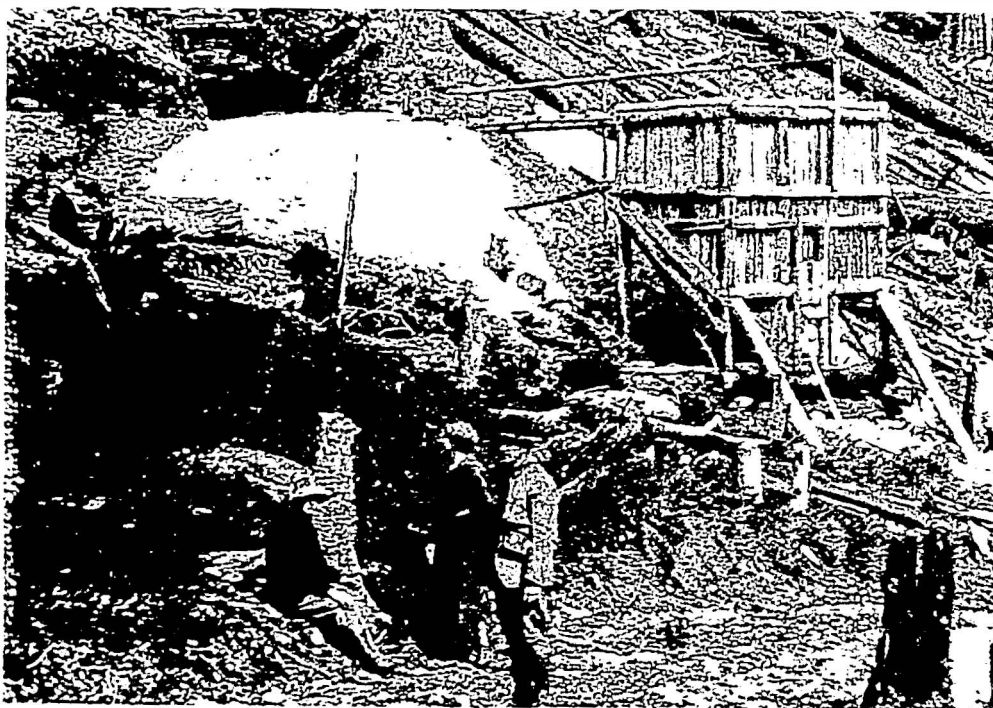


Plate 3.9: Mt Pelion Company's wolfram mine, 1920 (Cradle Mountain - Lake St Clair National Park). Photographer: Fred Smithies. Source: Archives Office of Tasmania.

The Mines Department had received applications for prospecting around Mt Pelion and these were being considered by Parliament.

Although the history of mining was not positive, the Secretary for Mines now appeared confident that these wolfram-bearing veins held potential. With the support of the Minister for Mines and Premier Ogilvie, Parliament rapidly proceeded to amend the Scenery Preservation Act in 1938. This allowed for the exemption of any specified portion of a reserve in order to make the land available for mining purposes. However, authority to grant permission for mineral prospecting within reserves or for reserve revocation still rested in the hands of the SPB.⁸¹

With the amendment in place, the Minister for Mines requested that an area of about five square miles near Mt Pelion be opened for mining. The Cradle Mountain Board (CMB) and the SPB were opposed to the idea, arguing that past mining activities had proved unprofitable and that a full geological investigation should be undertaken to prevent a further mistake being made. The Board was of the opinion that the area was of much greater value as a scenery and timber reserve than for the minerals it may contain, and that mining activities could result in extensive damage to the reserve through escaped fires. It also feared that allowing mining operations within a reserve would set a dangerous precedent.⁸²

The Mines Department refused to conduct a geological survey, regarding it unnecessary. Two years had elapsed since prospectors had lodged the original applications to the Mines Department in 1937, and the Department was now strongly urging the SPB to make the area available, stating,

In the interests in primary production and the unemployment menace, further delay in dealing with this matter is not justified. Every day's postponement means unwarranted hindrance to the possible production of a very valuable mineral.⁸³

The CMB and the SPB held their ground and continued to oppose the intrusion into the reserve. An angry exchange occurred between the Mines Department and the SPB, in which the Secretary for Mines said that such an area should not be included in any reserve unless under the provisions of the Mining Act. After a further refusal from the SPB,

the Secretary for Mines threatened to have no further discussions with the Board.⁸⁴

In passing the legislation that provided the amendment to the SPA, the Government had demonstrated its allegiance to the Mines Department and the economic interests of industry. Although the CMB had made an attempt to argue that the scenery and forests of the area were also of value, the outcome was heavily weighted against the Board. The revocation of 3 200 acres (1 324 hectares) of the reserve went ahead in 1939, and in an attempt to reconcile the SPB, some concessions were made. Restrictions were placed on the lighting of fires and hunting in the area and the Mines Department agreed that if after five years the mines were not being worked, the area would be returned to the reserve.⁸⁵ However, these were to be empty words. The Board did prove right in its judgement of the potential of the mines, and when an attempt was made in 1944 to reclaim the area, the Mines Department refused.⁸⁶

Hartz Mountains

The Hartz Mountains reserve comprised a large area of approximately 20 000 acres (8 275 hectares) and a small track-side reserve along the approach to this main area of approximately 3 000 acres (1 241 hectares). Pitt had secured the track-side reserve in order to offer some protection to the forests and scenery along the approach to the reserve proper. However, with the Legislative Council voting against the continuation of the road to Hartz in 1939, this left only a track that was largely used by those involved with timber cutting.

One of the main concerns of Pitt had been the potential of fire damage to the area through timber extraction activities. While the SPB was responsible for the management of land in reserves, it did not have the financial or other resources to effectively undertake many of its management obligations. As the promised road of tourist standard to the Hartz plateau had not been completed, and the main users of the existing track were those most likely to cause fire damage, the SPB moved that it be pointed out to the Forestry Department that fire protection was more a matter for that Department than for the Board.⁸⁷

The issue was discussed with the Conservator of Forests and the Board suggested handing over the strip along the track to the Forestry Department, while retaining the main area as a scenic reserve. This was agreed and the SPB gave the track-side reserve to the Forestry Department, in exchange for them keeping the track open as a patrol track. In 1943, 3 000 acres (1 241 hectares) of the Hartz reserve was revoked.⁸⁸

The provision of a road to the Hartz Mountains reserve remained a priority for the SPB. As tourism was seen to be one of the main roles of reserves such as Hartz, an access road to the plateau was considered essential. The SPB was not in a position of supporting such a large development without assistance. During the early 1950s, there was generally much support for the Hartz Mountains Road as it was supposed that it would increase tourism. Talk of the road sparked some novel ideas, such as one from a Hobart enthusiast who suggested the construction of a water ballast funicular railway that would transport delighted tourists from the terminus of the road to the summit of Hartz.⁸⁹

In the years since the proclamation of the Hartz Mountains reserve, forestry activities had expanded and the Forestry Commission had developed an interest in an area of valuable timber resources located within the Hartz reserve. In 1957, the Forestry Commission made an offer to the SPB to build a road of tourist standards to the Hartz Mountains plateau, subject to 700 acres (290 hectares) of the scenic reserve being excised and made available for forestry purposes.⁹⁰

Members of the SPB debated the offer. It was said that as the northern boundary of the reserve was selected arbitrarily (as were probably all boundaries), there would be little value lost and much to be gained if the proposal was adopted. By retaining the roadside trees as a buffer then the scenic values would be preserved in the part of the reserve to be excised. There was opposition to the proposal from Knight, who suggested that the Board had to be careful to see that areas of native forests, which were steadily dwindling, were included in scenic reserves. He argued that native forests should not be excised from

reserves just because they could be turned into cash. Smithies agreed with Knight in principle, but was of the opinion that as this was not a unique timber like Huon pine, his objection was not as strong. The offer meant that they would get the road they had sought for such a long time.⁹¹

The SPB agreed to the 'adjustment' to the reserve. A deal was struck, and in 1957, 700 acres (290 hectares) of valuable forest was handed over to the Forestry Commission, in exchange for the completion of a tourist quality road to the Hartz Mountains plateau.⁹²

Mt Field

In 1930 the Conservator of Forests approached the National Park Reserve Board (NPB) with the view of having the boundaries of the National Park revised. He suggested that the western boundary should be reduced to follow the main ridge, in order to have a well defined boundary between the State Forest and the National Park.⁹³ At this time, investigations were being made into areas suitable for inclusion in a large timber concession to be made available for the fledgling paper manufacturing industry in southern Tasmania. The western portion of Mt Field National Park, below the ridgeline, contained extensive stands of *Eucalyptus regnans* tall forest, a species of particular interest to the industry. Further submissions were made to the Board in 1932 by the Conservator to revise the western boundary of the reserve. The Board refused both requests, being of the opinion that maintenance of the present western boundary was important to the integrity of the reserve.⁹⁴

In 1932, a Joint Committee of Parliament passed the Florentine Valley Wood Pulp and Paper Industry Bill. This gave concession rights over 300 000 acres (124 120 hectares) of timber in the Florentine, Styx and Russell Rivers area to the Herald and Weekly Times Group, through the Derwent Valley Trading Company.⁹⁵ The concession area abutted the boundaries of Mt Field National Park and contained approximately 65% *E. regnans* forest. Negotiations between the Derwent Valley Trading Company, Paper Makers and Tasmanian Paper, resulted in the formation of Australian Newsprint Mills (ANM) in 1935. During this

period, shipments of Tasmanian hardwood were sent to Canada to investigate their potential for the production of pulpwood and paper.⁹⁶ The Ogilvie Government facilitated these experiments by passing the Florentine Valley Paper Industry Act in 1935.⁹⁷

The 1935 Act was a direct and further sign of Government encouragement for the development of the paper manufacturing industry in Tasmania, supported also by the offer of cheap electricity. As the Company had expended much money in experimental manufacture of newsprint and other papers from Tasmanian hardwood, it was encouraged to develop operations in the State through the granting of commercial rights over all timber in the concession area for a period of 88 years.⁹⁸ Government interests in the industry were further formalised in 1939 when, unable to secure investment from other companies, ANM approached Ogilvie for financial support and the Government bought in.⁹⁹

With the development of world-first technology for the use of hardwood in paper manufacture, ANM began the production of newsprint in 1941 at its new Boyer Mill, near New Norfolk. Production rapidly expanded and there was soon renewed interest in the *E. regnans* forests in Mt Field National Park.

In 1946 the NPB received correspondence from ANM in which it expressed a desire to work the forests on the slopes of Mt Field West.¹⁰⁰ *E. regnans* was the primary source of hardwood fibre and the Company argued that the area of *E. regnans* in their concession was insufficient to meet forecast demands. A sub-committee of the Board was appointed to investigate the request, which involved altering the boundaries of the reserve to gain access to 7 800 acres (3 227 hectares) of forest on the western end of the park. In exchange ANM offered to add to the reserve 7 770 acres (3 215 hectares) adjoining the northern boundary and 1 230 acres (509 hectares) adjoining the southern boundary, from its timber concession area. The sub-committee opposed the exchange of what they called "first class heavily timbered virgin forest" for "poor second and third class eucalypt and buttongrass country".¹⁰¹ The exchange was rejected on account of a lack of equivalent value, that it

would result in an undesirable precedent, and that the Board considered it their duty to preserve 'remnants' of Tasmanian forests.

A second offer was presented to the NPB from ANM in 1947 to exchange the forests in the west of the reserve for 12 000 acres (4 965 hectares) at the northern boundary of the reserve in the ANM concession on Mt Hobhouse, near Butlers Gorge. This application was made through the Premier (Cosgrove), who strongly urged the Board to agree to the proposed transfer. Cosgrove argued that in the concession area of the Company there was a great shortage of *E. regnans* and those areas of this forest type within the reserve were needed for the continuation of this industry.¹⁰² Although appeals were now being made from the highest authority, the SPB did not concede to the Premier stating, "...the forest forms a most pleasing foreground for the lovely panorama to be obtained from Mt Field West and other points along the scarp".¹⁰³

Unable to accept the position of the Board, Cabinet then requested that it be provided with the reasons for the refusal. The major objection was that the area in question contained one of the only stretches of remaining *E. regnans* virgin forest in Tasmania and that this should be reserved for posterity.¹⁰⁴ During the second World War, the demand for timber increased dramatically and there were concerns that natural forests were being depleted at a rapid rate. In 1945, Kessell produced an official report on forestry in Tasmania, in which he painted a serious picture of the forests situation, stating,

The remaining forests are but poor remnants of the magnificent stands of timber which occupied much of the present developed parts of the Island.¹⁰⁵

The recommendations of the Kessell report were that the Government enter into no more further commitments in regards to the exploitation of forests (this was a stand that Kessell quickly changed when he became the new Managing Director of ANM in 1946). In the second application to the Board, the Premier outlined the opinion of the Commissioner for Forests, who said that while there was evidence that *E. regnans* was restricted to perhaps as low as one quarter of the original stand, there

was not an overall shortage of this timber. It was also argued that other species which were suitable for sawmilling, were not at that time technically suitable for ground wood pulp (essential for newsprint production at Boyer).¹⁰⁶

The SPB did not agree with the position taken by the Commissioner for Forests and used the Kessell report to support its reasons for the retention of the *E. regnans* forests in the reserve. It was also argued that the Mt Field National Park was a scenic reserve and was thereby inalienable and that the SPB was appointed to protect reserves from fire and exploitation, not to hand them over to commercial interests. The forests were considered a unique scenic feature, within an important catchment area for the Florentine River, which would be adversely affected by the removal of timber.¹⁰⁷ As in the first proposal from ANM, the area offered in exchange for the forests was not regarded to be of equivalent value and the Board dug in its heels and continued to oppose the transfer.

Undeterred, ANM then put in a third application to the Board to exchange the desired forest area for 3 200 acres (1 324 hectares) along the southern boundary in the Russell Falls Valley. It was thought this may be more appealing to the Board as it was a more heavily forested area than those of the previous two offers and the Board seemed keen to retain a good sample of forest vegetation in the reserve.¹⁰⁸ The Premier sought the advice of the Commissioner for Forests on this exchange. He regarded it as a reasonable offer that would meet the Board's desire to preserve excellent examples of virgin forest in Tasmania.¹⁰⁹ In an attempt to satisfy the objections of the Board, it was argued that the area included tall forest specimens, was reasonably accessible, of great value for scientific study, a better location for protection from fire, and had other interesting features, including the possibility of limestone caves.

At the invitation of ANM, four members of the SPB and four of the NPB inspected the area proposed for addition to the reserve, accompanied by representatives of the Forestry Department and ANM. However, the SPB and the NPB again unanimously rejected this proposal. The grounds for objection were that this type of forest was already included in the reserve, it was not of equivalent value to the

area sought by ANM, and the SPB did not agree with the opinion of the Commissioner for Forests that the forests in the western part of the reserve were, "...too large to hold as a specimen area of virgin forest conditions".¹¹⁰

It was now obvious that the SPB would not consent to any proposed alterations to the boundaries of Mt Field National Park, for the purpose of making available timber for industry. Without the Board's consent, the only means of procuring the desired area of forests was to over-ride its authority through an Act of Parliament. In 1949, the National Park and Florentine Valley Bill was examined by a Joint Committee of Parliament.¹¹¹ Not all members of Parliament were in agreement with the Bill and those that objected to this interference with the authority of the SPB included the opposition Liberal leader, Bethune.¹¹² With all attempts to persuade the Board to hand over the *E. regnans* forests a failure, ANM proceeded with a legal line of argument - that the boundaries of the reserve had never been fixed properly on the ground. A lengthy debate ensued as to the real location of the western boundary of Mt Field National Park.

The Committee, chaired by Eric Reece (then Minister for Lands and Works), received evidence from a number of interested parties. Those supporting the SPB included: Hobart Walking Club; the Australian Natives Association; the Caverneering Club; the Tasmanian Art Society; the Ski Club of Tasmania; the Royal Society of Tasmania; the Tasmanian Field Naturalists; the National Fitness Council of Tasmania; and the Country Womens Association. Those in support of the ANM position included: the Tasmanian Timber Association; the New Norfolk Council; local sawmillers; and the Chief Commissioner for Forests.¹¹³

Surveys of the western boundary of Mt Field National Park were conducted by ANM and the Tasmanian Field Naturalists Club (on behalf of the SPB). These were not in agreement and the findings of the Committee were that the western boundary of the reserve from the summit of Mt Field West was not definite because the mountain feature was only sketched on the official charts and maps.¹¹⁴ Not surprisingly, this decision clearly favoured ANM. In 1950, the National

Park and Florentine Valley Act was passed by Parliament. This redefined the western boundary of the reserve and legalised the revocation of 3 680 acres (1 523 hectares) from Mt Field National Park to ANM, which was offset by the Company surrendering approximately 3 750 acres (1 552 hectares) to the reserve, along its southern boundary (Figure 3.7).¹¹⁵

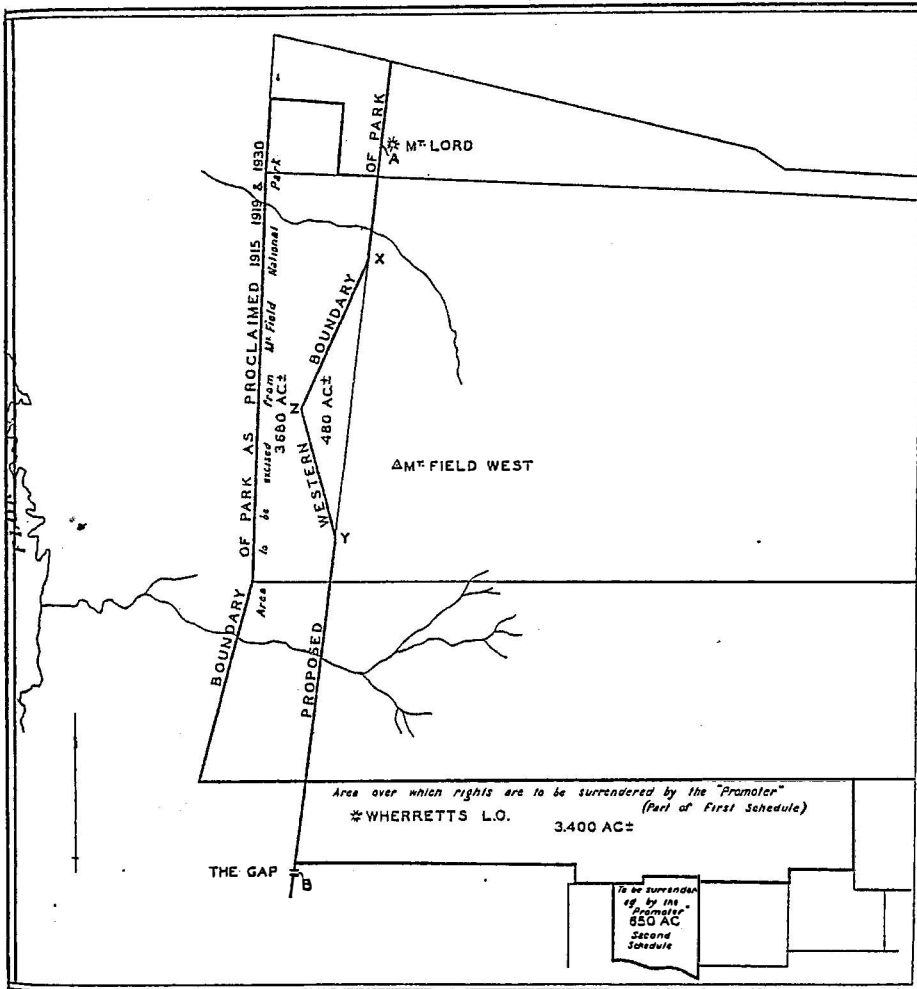


Figure 3.7: Revocation of the western portion of Mt Field National Park and southerly extension, 1950. Source: National Park and Florentine Valley Bill, 1949, No. 5. *Tasmanian Journals and Printed Papers of Parliament*, No. 31.

The decision was deplored by the SPB and its supporters, who had maintained throughout the debate that the reserve boundaries had been legally defined on three separate occasions and that these could be

located on the ground.¹¹⁶ Although the SPB took a brave stand against the Government, especially considering that members largely comprised public servants, it was powerless to do anything. The authority of the SPB and the security of reserves had again been undermined by the entwined economic interests of industry and the Government.

Discussion

During the middle period (1938-1970) five new national parks were established in Tasmania, along with a swathe of smaller scenic and other reserves. By 1970, over 400 000 hectares of the State was captured in the reserve system, with 95 per cent of this area in national parks and 5 per cent in small reserves (Table 3.1; Figure 3.8). This was a total increase of 178 per cent from the earlier period and represents a considerable effort directed towards the creation of new reserves between 1938 and 1970.

Table 3.1: National Parks and reserves in Tasmania, 1970. Source: Scenery Preservation Board Annual Report. *Tasmanian Journals and Printed Papers of Parliament*, Vol. 185, Part 2, No. 37, 1971.

* The Mt Barrow Scenic Reserve was classified as a National Park, but did not retain this status, due to its small area.

Name	Locality	Area (acres)	Area (hectares)
<i>National Parks:</i>			
Ben Lomond	North-East	39 615	16 032
Cradle Mt - Lake St Clair	Central Highlands	342 148	138 466
Frenchmans Cap	West Coast	25 240	10 215
Freycinet	East Coast	27 134	10 981
Hartz Mountains	South	21 300	8 620
Mt Barrow*	North	1 134	459
Mt Field	Derwent Valley	40 059	16 212
Rocky Cape	North-West	4000	1619
South-West	South-West	473 411	191 587
Sub-total:		974 041	394 191

Table 3.1 cont.

Name	Locality	Area (acres)	Area (hectares)
<i>Coastal Reserves:</i>			
Brown Mt-Remarkable Cave	Tasman Peninsula	150	62
Cookville-Penguin Island	Bruny Island	3	1
Eaglehawk Neck & Foreshore	Tasman Peninsula	90	37
Eaglehawk Neck-Taranna	Tasman Peninsula	61	25
Esplanade, Point Puer	Tasman Peninsula	58	24
Fluted Cape-Cloudy Bay	Bruny Island	600	248
Fossil Island	Tasman Peninsula	3	1
Lookout Rock	Bicheno	6	2
Port Davey Foreshore	South-West	1350	559
Port Davey Islands	South-West	202	84
Pt Puer-Crescent Bay	Tasman Peninsula	92	38
Stewarts Bay	Tasman Peninsula	10	4
Tasman Arch-Blowhole	Tasman Peninsula	141	58
Tesselated Pavement	Forestier Peninsula	10	4
Waterfall Bay	Tasman Peninsula	30	12
<i>Waterfalls:</i>			
Forth	Sheffield	136	56
Liffey	Western Tiers	251	104
Marriott	National Park	300	124
Mt Barrow	North	200	92
St Columba	Pyengana	775	321
<i>River Reserves:</i>			
Derwent Cliffs	New Norfolk	12	5
Gordon River	West Coast	6200	2565
Pieman River	West Coast	8215	3399
Roger River Pass	North-West	430	118
<i>Cave & Geological Reserves:</i>			
Baldock	Mole Creek	106	44
Gunn's Plains	Ulverstone	25	10
Hastings	South	132	54
Henty Glacial Moraine	West Coast	2	0.8
King Solomon	Mole Creek	500	207
Marakoopa	Mole Creek	176	73
<i>Scenic Roads:</i>			

Table 3.1 cont.

Name	Locality	Area (acres)	Area (hectares)
Lyell Highway	West	18 000	7447
Murchison Highway	West	1516	627
St Marys Pass	St Marys	675	279
Zeehan-Renison Bell	West	272	113
<i>Fern Gullies, Forests &</i>			
<i>Other Features:</i>			
Bird Sanctuary	Steppes	16	7
Bradys Lookout	Rosevears	2	0.8
Chalet	Hastings	1	0.4
Corinna	West Coast	8	3
Corra Linn	Launceston	1	0.4
Denison River Huon Pine	South-West	1000	414
East Risdon Flora Reserve	Derwent River	110	46
Fairy Glade	Western Tiers	97	40
Ferndene Gorge	Penguin	7	3
Hellyer Gorge	Waratah	1407	582
Lookout	Port Arthur	8	3
Mt Montgomery	North-West	740	306
Mt Strzelecki	Flinders Island	9750	4034
Notley Gorge	West Tamar	28	12
St Patricks Head	St Marys	370	153
Thermal Springs	Hastings	19	8
Thermal Springs	Kimberley	2	0.8
Waterfall Creek	Bruny Island	60	25
Total:		1 028 396	416 627

Those active in promoting new reserves during this period included numerous individuals and interest groups, with a variety of specific motives. In the early years, moves to create reserves came from within the SPB. Pitt, who was Chairman of the Board, was largely responsible for the establishment of Hartz Mountains National Park and other roadside and riparian reserves in the west of the State. Mosley suggested that the creation of these reserves was due to the interest in tourism development by Premier Olgilvie, who led the post-depression

economic recovery.¹¹⁷ However, Castles contended that while Olgilvie did have an interest in the creation of scenic reserves, it was largely through the efforts of Pitt that a number of new reserves were established in the late 1930s.¹¹⁸

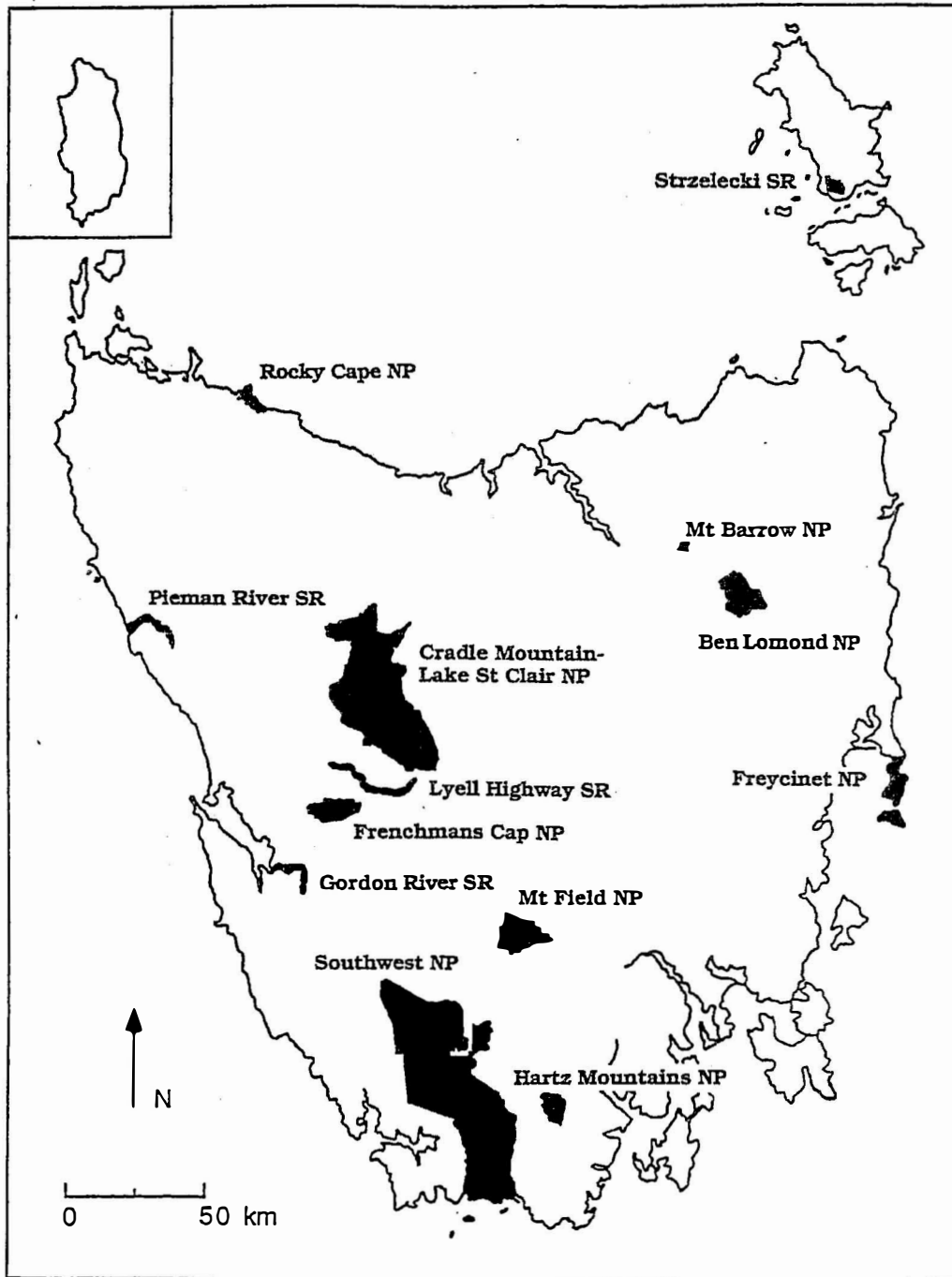


Figure 3.8: National Parks and equivalent large reserves in Tasmania, 1970. NP - National Park; SR - Scenic Reserve.

There is evidence to suggest that Pitt was, at least partly, motivated by his concerns over extensive landscape damage occurring at the time when the State was being opened up by new roads. The desire to protect nature and scenery were behind his reserve proposals, which were also linked with opportunities for developing tourist destinations, as evidenced by his reactions to the cut in funding for the Hartz Mountains Road. As Castles maintained, the hand of fate had proven fortunate for the SPB and the development of the reserve system when Pitt became Chairman of the Board in 1938, through his position as Surveyor General.¹¹⁹

Damage to native vegetation and scenery through fire were also the motives behind the Frenchmans Cap proposal, which was initiated by a concerned individual. The tourism role of reserves was also evident in this case when the SPB initially argued against the reserve on grounds of its inaccessibility. Opportunities for developing tourism and recreation in the State were the driving force behind a number of reserve promotions during this period. The Mt Barrow area was proposed for reservation by the Tasmanian Government Tourist Bureau as a scenic tourist destination, backed by Smithies and the Launceston 50 000 League. Ben Lomond was similarly seen by the SPB as an area of great potential as a tourist and recreational resort, and a possible source of State revenue.

All of the large reserves created were in mountainous areas of high scenic attraction. The scenery theme was also reflected in the range of small reserves established during this period, which included coastal reserves, waterfalls, rivers, caves, fern gullies, forests and other features (Table 3.1). While nature and scenery preservation provided the motives behind some of the reserve proposals, appeals to the tourist potential of these areas no doubt aided their reservation. The ongoing struggle of the SPB to open up and develop reserves supports this idea, which is further attested by moves made at the instigation of the Director of the Government Tourist Department to elevate the status of the principal reserves through a change in nomenclature. Although many of the larger reserves were referred to as national parks, Mt Field, Cradle Mountain - Lake St Clair, Freycinet, Hartz Mountains,

Frenchmans Cap, Ben Lomond and Mt Barrow were officially renamed as such in 1946 to aid their promotion and increase their appeal.¹²⁰

The dominant motives for the creation of reserves during most of this period appear to have been for the protection of scenery and nature, and for the development of tourist and recreational areas. The nature preservation motive was largely general, but began to be targeted towards specific biological elements towards the end of the period. For example, in the case of Hartz Mountains and Frenchmans Cap, there was general concern over loss of forests and other native vegetation through fire, while the Rocky Cape reserve was promoted both for the protection of a specific species (*Banksia serrata*) and for the conservation of examples of coastal vegetation.

However, new themes also emerged towards the end of this period. In the South-West National Park debate, wilderness preservation became an important issue for the first time in Tasmanian reserve history. The idea of reserving large tracts of wilderness free from development was in direct conflict with the official policy of opening up reserves through roads and the provision of visitor facilities. The wilderness motive brought a new perspective on the role of reserves, and during the mid-late 1960s, it began to gain popular support. Other Australian studies have also suggested that the wilderness conservation theme in national park development can be dated to the late 1960s.¹²¹

The south-west debate also saw the emergence of a popular movement in support of national park creation. Those directly involved with the promotion of this reserve included a wide range of interested groups and individuals, organised into the South-West Committee, and there was also much public debate generated over this issue. Prior to this, the general public had not played an active role in reserve creation, and the dominant exploitative ethos was largely unchallenged.

Between 1938 and 1970, over 14 100 acres (5 800 hectares) was revoked from national parks and other reserves (Table 3.2). This was a direct result of changes in the perceived economic value of the natural resources contained within reserves. The major revocations during this period involved the forest, mining and energy generation

industries, and both the private and the public sectors.¹²² In the cause of economic growth and State development, the Government facilitated the revocation of reserves through Acts of Parliament and seriously eroded the authority of the SPB and security of the reserve system.

Table 3.2: Reserve revocations, 1938-1970. Source: Mercer, D. and Peterson, J., 1986. The revocation of national parks and equivalent reserves in Tasmania. *Search*, 17, (5-6), 134-140.

Reserve	Date	Area	Area
		(acres)	(hectares)
Cradle Mountain - Lake St Clair	3/5/1939	3 130	1 295
Cradle Mountain - Lake St Clair	4/9/1940	544	225
Freycinet	4/5/1941	10	4
Freycinet	11/3/1942	5	2
Hartz Mountains	7/4/1943	2 934	1 214
Mt Field	14/12/1950	3 600	1 489
Hartz Mountains	12/3/1952	979	405
Bass Highway	31/3/1954	1 721	712
Hartz Mountains	5/3/1958	684	283
Freycinet	19/12/1962	10	4
Murchison Highway	31/7/1968	300	124
Lake Pedder	8/2/1970	215	89
Total:		14 132	5 846

During this period, successive Tasmanian Governments pursued a policy of 'hydro-industrialisation', whereby industries were offered cheap electricity and other subsidies as incentives to establish and expand operations in the State.¹²³ This resulted in the growth of an alliance of power between the State Government and the HEC, which reached its zenith during the 1960s and the south-west dams controversy.

Castles maintained that while the development ethos ruled during this period, the challenges to reserves were not just simple anti/pro-

conservation conflicts. Some of those who were in power and involved in these struggles were not against conservation *per se*, but their decisions were framed within the dominant developmental paradigm.¹²⁴ Nevertheless, where economic interests were at stake, these inevitably won out against the less tangible arguments of aesthetics and conservation.

This middle period of reserve creation in Tasmania thus saw the continuation of the conservation themes that were dominant during the early period (1916-1937) - scenery preservation, nature preservation, tourism and recreation. It also ushered in the beginnings of a new theme - the conservation of wilderness. While individuals and organisations with interests in the natural environment or tourism were responsible for the creation of the majority of reserves, in the later years of this period, a popular conservation conscience began to emerge. Despite all attempts to prevent intrusion into reserves, where natural resources became the focus of interest from developers, the strongly entrenched economic growth paradigm continued to dominate.

ENDNOTES - CHAPTER 3

1. Robson, L., 1991. *A History of Tasmania. Volume Two*. Oxford University Press, Melbourne.
2. Scenery Preservation Board (SPB), Minutes of Meetings, 6/6/1938.
3. Correspondence: Secretary for Lands to Minister for Lands and Works, 24/11/1938.
4. SPB, Minutes of Meetings, 6/6/1938.
Correspondence: SPB to Minister for Lands and Works, 10/6/1938.
5. Correspondence: SPB to Public Works Department, 27/5/1938.
6. *The Mercury*, 20/9/1938.
7. *The Huon and Derwent Times*, 3/8/1939.
8. *Ibid.*
9. *Ibid.*
10. SPB, Minutes of Meetings, 6/11/1942.
11. Castles, G., 1986. Handcuffed volunteers. A history of the Scenery Preservation Board in Tasmania, 1915-1971. Unpublished Honours Thesis, University of Tasmania.
12. SPB, Minutes of Meetings, 6/6/1938 and 6/10/1938.
13. SPB, Minutes of Meetings, 6/10/1938.
14. *Ibid.*
15. SPB, Minutes of Meetings, 24/6/1925.
16. Branagan, J. G., 1984. *A Great Tasmanian. Frederick Smithies, O. B. E.* Royal Press, Launceston, Tasmania.
17. *Ibid.*
18. Correspondence: Secretary of Tasmanian Government Tourist Bureau to Director of Tasmanian Government Tourist Bureau, 4/5/1938.
Correspondence: Tasmanian Government Tourist Bureau to SPB, 6/5/1938.
19. *Ibid.*
20. SPB, Minutes of Meetings, 30/1/1940.
21. Interview with Jessie Luckman, 10/9/1998.
22. SPB, Minutes of Meetings, 30/1/1940.
23. Branagan, 1984, *op. cit.*
24. Interview with Jessie Luckman, 10/9/1998.
SPB, Minutes of Meetings, 6/11/1942.
25. SPB, Minutes of Meetings, 12/1/1951.
26. SPB, Minutes of Meetings, 1/6/1951, 3/7/1951.
27. SPB, Minutes of Meetings, 6/11/1942.
28. Branagan, 1984, *op. cit.*
29. *Ibid.*

30. SPB, Minutes of Meetings, 8/10/1946.
31. Correspondence: Northern Tasmanian Alpine Club to SPB, 27/5/1947.
32. Correspondence: SPB to Northern Tasmanian Alpine Club, 19/6/1947.
SPB, Minutes of Meetings, 13/6/1947.
33. Robson, 1991, *op. cit.*
34. SPB, Minutes of Meetings, 19/2/1954.
35. SPB, Minutes of Meetings, 19/3/1954.
36. SPB, Minutes of Meetings, 19/3/1954 and 3/5/1954.
37. SPB, Minutes of Meetings, 27/8/1954.
38. Interview with Jessie Luckman, 10/9/1998.
39. *Ibid.*
40. *Ibid.*
41. SPB, Minutes of Meetings, 10/10/1947.
Interview with Jessie Luckman, 10/9/1998.
42. SPB, Minutes of Meetings, 2/2/1962 and 8/6/1962.
43. The *Examiner*, 24/3/1962.
44. SPB, Minutes of Meetings, 7/12/1962.
The *Mercury*, 13/12/1962.
45. The *Mercury*, 11/12/1962.
46. The South-West Committee, 1966. Submission covering conservation and development of south-west Tasmania. The South-West Committee, Hobart.
47. Interview with Jessie Luckman, 10/9/1998.
48. The South-West Committee, 1966, *op. cit.*
Interview with Jessie Luckman, 10/9/1998.
49. The *Mercury*, 15/12/1962.
50. The *Mercury*, 24/9/1966.
51. The *Mercury*, 14/12/1962.
52. The South-West Committee, 1966, *op. cit.*
53. The *Examiner*, 21/8/1965.
54. The *Examiner*, 21/10/1965.
The *Examiner*, 8/6/1967.
Interview with Jessie Luckman, 10/9/1998.
55. The *Mercury*, 15/4/1966.
56. The South-West Committee, 1966, *op. cit.*
The *Examiner*, 7/9/1966.
57. The *Examiner*, 21/8/1965.
58. Mosley, G., 1966. The Tasmanian national park system. *Tasmanian Tramp*, 17, 43-49.

59. The South-West Committee, 1966, *op. cit.*
60. The *Mercury*, 10/10/1966.
61. Knight, A. W., 1967. Gordon River Road. *Hydro News*. April-June, 1967.
62. The *Examiner*, 7/6/1967.
63. The *Mercury*, 31/5/1967.
64. The *Examiner*, 9/6/1967.
65. The *Mercury*, 15/6/1967.
The *Examiner*, 29/6/1967.
66. The *Examiner*, 24/8/1967.
67. The *Mercury*, 5/5/1967.
68. The *Mercury*, 5/7/1967.
69. The *Examiner*, 19/6/1967.
70. Gordon River and Thermal Power Development. Report of the Select Committee of the Legislative Council with Minutes of Proceedings. *Journals and Printed Papers of Parliament (J.P.P.)*, 1967, No. 25.
71. The *Mercury*, 5/7/1967.
72. SPB, Minutes of Meetings, 3/5/1963.
The *Advocate*, 12/5/1966.
73. SPB, Minutes of Meetings, 3/5/1963.
74. SPB, Minutes of Meetings, 9/4/1965.
75. *Ibid.*
76. Correspondence: Mr J. F. Jones to Northern SPB, 20/9/1947.
The *Examiner*, 8/11/1947.
77. Correspondence: Queen Victoria Museum to Lands and Surveys Department (undated).
The *Examiner*, 25/3/1967.
78. The *Mercury*, 22/5/1967.
79. The *Mercury*, 29/6/1967.
80. Cradle Mountain Reserve Board (CMB), Minutes of Meetings, 9/11/1937.
81. An Act to amend the Scenery Preservation Act, 1915. (2 Geo. VI, No. 30). *Tasmanian Acts of Parliament*, 1938.
82. Correspondence: CMB to Minister for Mines, 20/11/1937, 26/11/1937 and 3/5/1938.
Correspondence: CMB to SPB, 20/2/1939.
83. Correspondence: Mines Department to SPB, 8/3/1939.
84. Correspondence: Mines Department to SPB, 9/3/1939 and 5/4/1939.
85. CMB, Minutes of Meetings, 17/2/1939.
86. Correspondence: Mines Department to SPB, 8/10/1944.
87. SPB, Minutes of Meetings, 6/11/1942.

88. SPB, Minutes of Meetings, 29/1/1943 and 2/7/1943.
89. *The Mercury*, 26/7/1957.
90. SPB, Minutes of Meetings, 26/7/1957.
91. *Ibid.*
92. SPB, Minutes of Meetings, 8/11/1957.
93. Correspondence: Conservator of Forests to National Park Reserve Board (NPB), 12/5/1932.
94. Correspondence: SPB to Conservator of Forests, 20/5/1932.
95. Florentine Valley Wood Pulp and Paper Act, 1932 (23 Geo. V., No. 10). *Tasmanian Acts of Parliament*, 1932.
96. Robson, 1991, *op. cit.*
97. The Florentine Valley Paper Industry Act, 1935 (26 Geo. V., No. 27). *Tasmanian Acts of Parliament*, 1935.
98. Dargavel, J., 1984. Pulp and paper monopolies in Tasmania. In: Taylor, M. (Ed.), *A Geography of Australian Corporate Power*. 69-89.
99. Robson, 1991, *op. cit.*
100. NPB, Minutes of Meetings, 14/8/1946.
101. NPB, Minutes of Meetings, 30/10/1946 and 23/10/1946.
102. Correspondence: Premier to SPB, 9/7/1947.
103. Correspondence: SPB to Premier, 15/7/1947.
104. Correspondence: SPB to Minister for Lands and Works, 24/7/1947.
105. Kessell, S. L., 1945. Report on the Forests and Forestry Administration in Tasmania. *J.P.P.P.*, No. 42, 1945.
106. Correspondence: Premier to SPB, 9/7/1947.
107. Correspondence: SPB to Minister for Lands and Works, 24/7/1947.
108. NPB, Minutes of Meetings, 9/8/1948.
109. Correspondence: Chief Commissioner of Forests to Premier, 13/1/1948.
110. Correspondence: NPB to SPB, 18/2/1948.
- Correspondence: SPB to Minister for Lands and Works, 24/2/1948.
111. National Park and Florentine Valley Bill, 1949, No. 5. *J.P.P.P.*, No. 31, 1949.
112. Robson, 1991, *op. cit.*
113. National Park and Florentine Valley Bill, 1949, *op. cit.*
114. *Ibid.*
115. National Park and Florentine Valley Bill, 1950, No. 37. *J.P.P.P.*, No. 55, 1950.
- National Park and Florentine Valley Act, 1950, *J.P.P.P.*, No. 71, 1950.
116. Castles, 1986, *op. cit.*
117. Mosley, G., 1966. Aspects of the Geography of Recreation in Tasmania. Unpublished PhD Thesis, Australian National University, Canberra.

118. Castles, 1986, *op. cit.*

119. *Ibid.*

120. SPB, Minutes of Meetings, 8/11/1946.

121. Mosley, G., 1978. A history of the wilderness reserve idea in Australia. In: Mosley, G., (Ed.), *Australia's Wilderness Conservation and Progress*. Australian Conservation Foundation, Canberra, 27-33.

Frawley, K., 1988. The history of conservation and the national park concept in Australia: a state of knowledge review. In: Frawley, K. and Semple, N., (Eds.), *Australia's Ever Changing Forests*. Australian Defence Force Academy, Canberra, A.C.T., 395-417.

122. Mercer, D. and Peterson, J., 1986. The revocation of national parks and equivalent reserves in Tasmania. *Search*, Vol. 17, Nos 5-6, 134-140.

Gee, H. and Fenton, J. (Eds.), 1978. *The South West Book*. Australian Conservation Foundation, Melbourne.

Dragun, A. K., 1983. Hydroelectric development and wilderness conflict in South-West Tasmania. *Environmental Conservation*, 10, 197-204.

123. Robson, 1991, *op. cit.*

Dargavel, 1984, *op. cit.*

124. Castles, 1986, *op. cit.*

CHAPTER 4

The Charge of the Green Brigade

(The Late Period: 1971-1992)

The Lake Pedder/south-west controversy of the 1960s brought a sharper focus on national parks and the reserve system in Tasmania than had occurred previously in the middle period. The existing legislation was demonstrated to be ineffective in protecting the environment and the SPB was clearly lacking in power and resources. This was particularly highlighted when challenges were made to reserves from those with economic interests and by the growth in public pressure to protect and expand the reserve system.

A new National Parks and Wildlife Act was passed in 1970 and in 1971 a new authority was created to manage the reserve system - the National Parks and Wildlife Service (NPWS). With an enthusiastic full time director appointed to the NPWS (Peter Murrell), this marked the beginnings of a fresh era of conservation in Tasmania. This period was to bear witness to a massive growth in the reserve system, but was also one marked with intense struggles for land between the conservationists and the developers.

Growth and Conflict

Maria Island

In the late 1950s/early 1960s members of the Animals and Birds Protection Board (ABPB) were voicing concerns over the possibility of further extinctions of species of native fauna if measures were not taken to provide suitable reserves. A number of fauna sanctuaries had been established in the State under the Animals and Birds Protection Act, 1928. However, these offered little real protection for native fauna,

primarily due to the lack of ability to police these areas, a situation considered by the Board to be "something of an embarrassment".¹

The spread of development was proceeding at a rapid pace during the post-Second World War years and the effectiveness of a number of small fauna sanctuaries scattered around the State was being questioned. The ABPB felt it would be desirable to establish one or more large sanctuaries suitably developed as fauna conservation areas, in positions where they could be adequately policed. The Board argued that, "...such an arrangement had proved very satisfactory in other countries, notably Africa, where native animals are concentrated in very large belts of country and full advantage is taken of the park so created both as a tourist asset and as a facility for scientific study".²

In 1960 the ABPB proposed the creation of a National Fauna Reserve:

It is obvious that the encroachment of agriculture and industry throughout Tasmania represents a threat to a number of species of native animals...we have in Tasmania a fine heritage of native fauna, and in the opinion of the Animals and Birds Protection Board, it is most desirable that we should take early action to ensure the preservation of these threatened species. It is also the opinion of the Animals and Birds Protection Board that the methods which in the past have been adopted towards this end should be reviewed.³

The type of land considered most appropriate for such a purpose was the drier eastern sclerophyll habitat, and the Board investigated alternative areas for their suitability, primarily the Freycinet Peninsula (east coast) and the Musselroe Bay/Ansons Bay area (north-east Tasmania). While both areas contained suitable habitat, the Freycinet Peninsula was more accessible, was already partly reserved under the Scenery Preservation Act and also offered high potential for tourism.⁴

While the proposed reserve was argued to be for the preservation of habitat for native fauna, the original idea of securing this reserve was for one specific species, the Tasmanian tiger (*Thylacinus cynocephalus*). Although presumed extinct, there was still substantial hope at this time that one or more Tasmanian tigers would be found and if so, the ABPB

required a suitable refuge for them. During the 1960s, the Board invested considerable energy into finding the elusive Tasmanian tiger, an activity that had some support from the Government, particularly Premier Eric Reece, who granted the Board £2000 in 1963 to aid their tiger search.⁵

While providing a reserve for the Tasmanian tiger was the original motive behind the proposal, the idea of preserving a large tract of dry sclerophyll habitat for native fauna, particularly those species under threat, was also significant. Very little dry sclerophyll vegetation was represented in the system of national parks and reserves proclaimed under the Scenery Preservation Act and much of this habitat was in fact privately owned. Relations between the SPB and the ABPB were poor and the Chairman of the ABPB, Dr Eric Guiler, could see the development of a vacuum. The SPB was dominated by public servants, most of whom at this time had little enthusiasm for nature conservation, including the Chairman (Frank Miles). In the opinion of Guiler, "the SPB was very largely a useless organisation".⁶ It had little political clout and could easily be muzzled by the Government. By proposing a National Fauna Reserve, rather than a national park or scenic reserve, the ABPB aimed to create a reserve over which it had control. In contrast to the SPB, the ABPB was a Statutory body, and did in fact have considerable power, which was demonstrated on occasion. The Chairman (Guiler), for example, once ordered the prosecution of the Board's own Minister for illegally using penguins as crayfish bait.⁷

In promoting the National Fauna Reserve, the ABPB also recognised that from the Government's point of view, it would be desirable to combine the aspects of a nature conservation reserve with tourism. The Board was also prepared to relinquish some of its smaller reserves in order to secure a larger fauna reserve.⁸ A delegation from the Board presented the idea to the Minister for Agriculture and a Cabinet submission was made in early 1961. A Cabinet sub-committee, appointed to consider the proposal, agreed with the idea in principle but also requested that consideration be given to the suitability of other areas for the National Fauna Reserve.⁹

Part of the hesitation with the Freycinet Peninsula was that the area proposed for reservation included not only the existing scenic reserve, but also freehold land, grazing leases and occupational licences. Acquiring the entire area for the purposes of a fauna reserve would involve the Government in considerable expense, especially as land around the Freycinet Peninsula/Coles Bay area was relatively expensive. Although not initially happy with the outcome, the ABPB agreed to inspect other areas as potential Fauna Reserves. The Board did recognise that their proposal, which went beyond the existing Freycinet National Park boundaries, would face management problems particularly with the township of Coles Bay, including those associated with human activities and domestic pets. While the area did contain good habitat for waterfowl, the diversity of habitat for other fauna was not as great as could be found elsewhere.¹⁰

During 1961, investigations were made at Little Swanport (east coast), Southport and Mt Picton (far south-east), Tooms Lake (eastern Tasmania), areas along the north-west coast and Maria Island (off the east coast of the State). The favoured alternative of the Board became Maria Island. A flight over the Island by Guiler and other members of the Board revealed a variety of terrain, vegetation types and habitats, which they considered would be highly suitable for the fauna conservation project. Its island status also meant it would not have to be fenced and the area could be more easily controlled.¹¹

The Board approached the Government with this alternative proposal. In a letter to the Minister for Agriculture, Guiler outlined the reasons for establishing the reserve:

The sclerophyll forest and open scrub of Tasmania is an area which is being developed at a most rapid rate on the Tasmanian mainland. This type of country is of the greatest use to our native animals and birds and activities in this type of land development are having and will continue to have an even greater effect on our fauna...the purpose of a sanctuary or a reserve is to preserve the habitat for the fauna...Maria Island offers a wide variety of habitats from open forest, scrub and thick forests, to cleared paddocks, with fern gullies and ample water, and is ideal for this purpose. Above all, it is rich

in the sclerophyll forest habitat. It does not require fencing or elaborate boundary proclamations.¹²

Maria Island was promoted as a multiple purpose reserve with the twin objectives of conservation and tourism development. It was said to be an area where, "...the public could readily observe animals within an area in which the principles of conservation were being practiced".¹³ Moves to have the Island vested in the Board as a National Fauna Reserve were initially made in 1962. While there was positive interest, Cabinet was reluctant to agree to the entire proposal at the time, possibly due to other moves to develop Maria Island as a tourist resort.¹⁴

By the mid-1960s there was also support for the Maria Island reserve proposal from other interested groups, including the Federation of Field Naturalists Clubs, which wrote a letter to the the SPB recommending the declaration of Maria Island as a national park. Apart from Maria's natural aspects, the Field Naturalists were keen to promote the preservation of historic features which they proclaimed to be of great value for tourism:

Maria Island, considered as a tourist centre, possesses better preserved and more numerous remains of convict settlement than Port Arthur. The very mild climate would encourage visitors to bathe, fish, explore and climb on this island; suitably developed; it could become as attractive a holiday resort as some of the better known Coral Reef islands in Queensland...By taking steps to reserve this island, we should be preparing the ground for creating a widely known scenic holiday island, to attract the tourists to Tasmania.¹⁵

Although Maria Island contained significant tracts of natural vegetation, the more accessible areas did have a long history of human use and landscape change. In the 1960s, just over half of the island was privately owned or held under grazing leases. During the nineteenth century, the island was utilised as a natural prison, with two main periods of convict occupation. Maria also supported two phases of industrial activity. In 1884 an Italian, Signor Bernacchi, leased the island and formed a company with the intention of growing grapes. He

also established a cement industry, however, both schemes failed. The cement operation was revived during the 1920s, when it employed around 500 people, but the venture again failed and ceased operations in 1929.¹⁶

In 1964 a private property (the Coleman Estate) on Maria was offered for sale. With the assent of Cabinet, the ABPB purchased the land for £250, at their own expense. At this time there was also interest in the island from an aero club that had gained approval for constructing an airstrip on Maria. This completed, they began to make further requests for other facilities, including overnight accommodation. It came to light that the aero club was planning a large tourist development on the island, including a hotel and golf course. This was an idea that did not sit well with the ABPB. To block these moves, the Board had an old airstrip on the island (at Darlington) revamped. It was offered for use at no fee, was in an accessible and open position, and its alignment was much favoured by pilots (the rival airstrip was not constructed in view of the nature of the winds and was surrounded by tall trees). This completely killed the aero club's airstrip and their plans for further development collapsed. However, despite approval for the Fauna Reserve, the Government continued to grant a lease to the aero club for some time.¹⁷

■
The Maria Island National Fauna Reserve proposal was officially approved in May, 1965 and the Lands Department was instructed by the Premier to purchase lands as they came on the market. The French property at Darlington was purchased in 1966 for £17 000, a major step in bringing the island under the control of the ABPB.¹⁸ There was a proposal to subdivide French's property into two acre 'shack' blocks, which was just beaten through compulsory acquisition. During the mid-late 1960s there was considerable urgency in acquiring freehold land on the island due to developmental pressures, and Guiler reflected on the fate of the proposal, "...if we had been three months later in getting the first property it [the Island] would have gone".¹⁹ Further land resumptions and lease closures took place during the late 1960s and 1970s.

Maria Island was to be developed as a 23 000 acre (9 300 hectare) fauna reserve, with facilities for tourists. It was euphemistically reported in the *Mercury* that this development would be "...certain to make it as unique as South Africa's world famous Kruger National Park".²⁰ The management objectives were for Maria to be zoned for multi-purpose use. The primary objective was to manage, retain and enhance the value of the island, as an example of natural and semi-natural vegetation with its related fauna. Other objectives were to provide areas for visitor use and recreation, to maintain historic features, and for the island to be available for biological studies and research.²¹

The ABPB made a survey of the Island's fauna in 1967, following which a 20 year plan was developed to rebuild a complete population of the original (pre-European) Tasmanian fauna.²² One interesting project mooted by the Curator of Wildlife was an attempt to revive the extinct Tasmanian emu through crossing mainland birds which were similar biologically to the Tasmanian sub-species. In 1969, four selected short-legged emus were consigned from Victoria and transported to Maria Island.²³ Not surprisingly, this biological experiment was a failure. The emus did breed, but the Tasmanian emu was not recreated and all emus on the island were later culled, partly due to the threat they posed to visitors.

Threatened species were introduced to the island, including the Forester kangaroo and the barred bandicoot. The initial attempts to transport Forester kangaroos to Maria resulted in 60 per cent of individuals dying from shock.²⁴ However, as with the emu, they did breed successfully, and in later years the population has had to be thinned. By 1971 a total of 722 animals and birds had been introduced to the island and were successfully breeding. This included, 45 Forester kangaroos, 127 Bennetts wallabies, 28 Flinders Island wombats, 15 brush-tailed possums, 16 ring-tailed possums, 136 potoroos, 123 bettongs, 43 echidnas, 16 marsupial mice, 42 brown bandicoots, 55 barred bandicoots and 13 pademelons. Birds included, emus, ducks, black swans, brown quail and Cape Barren geese.²⁵

Although the Maria Island project was approved in 1965, it was not until 1971 when the resumption of all land was complete that the area

was proclaimed a reserve. The status of Maria Island was initially as a sanctuary under the Animals and Birds Protection Act of 1928, and it became a Conservation Area under the new National Parks and Wildlife Act, 1970. Towards the end of 1971 the National Parks and Wildlife Service (NPWS) made a case for the proclamation of Maria Island as a national park to provide greater security of tenure and tighter regulations. As a considerable amount of money had already been spent on land acquisition (over \$107 000), management and development, the NPWS argued that the island must be brought under its full control to ensure continuity of management and to justify further long-term investment.²⁶ Cabinet approved upgrading the status of Maria Island and in 1972 it became a State Reserve, known as Maria Island National Park (Figure 4.1).

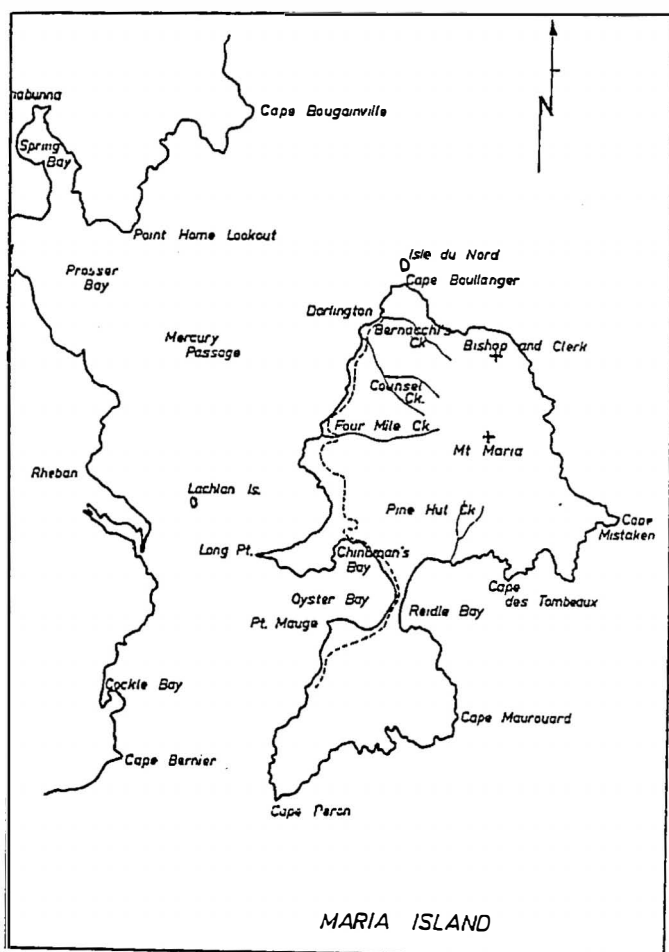


Figure 4.1: Maria Island National Park. Source: National Parks and Wildlife Service, 1971. *Maria Island National Park.* National Parks and Wildlife Service, Sandy Bay, Tasmania.

Mt William

In 1966 and 1967 approaches were made to the SPB and the Minister for Lands from local farmers to have a Forester kangaroo sanctuary proclaimed in north-east Tasmania. They suggested that unless a reserve was secured at Mt Cameron in the north-east, or in the far north-east corner of the State near Mt William, the Forester kangaroo would become extinct in the area. Further pressure was put on the Minister for Lands by the Tasmanian Farmers Federation, stating concern at the scale of land development in the north-east and seeking the reservation of a suitable area for the threatened Forester kangaroo.²⁷

The Forester kangaroo, once widespread in grassy open habitats of the State was now restricted to three main populations, two in the agriculturally developed Midlands and one in the north-east. The Commonwealth Scientific and Industrial Research Organisation (CSIRO) was undertaking research in the north-east of Tasmania and reported to the SPB in 1967 that the area was of great biological interest. Representatives of the Launceston Museum also published an account of the significance of the fauna of the area, including the Forester kangaroo.²⁸

■
With growing interest in the plight of the Forester kangaroo and repeated requests from local farmers for the creation of a conservation reserve, in 1967 the Curator and field staff of the Animals and Birds Protection Board (ABPB) made ground and aerial surveys in the north-east corner of the State. The Board suggested that a block of land bounded by Musselroe Bay-Ansons Bay and extending inland to include Mt William, provided the best remaining Forester kangaroo population and habitat in the area. Advances were made by the ABPB to the Minister for Lands stressing the need for establishing a reserve in the Mt William area. Attention was drawn to the fact that Forester kangaroo populations had been significantly reduced in the State as a whole and there was now a pressing need to conserve habitat for this species if it was to survive in the wild.²⁹

However, there was a major obstacle to the creation of a reserve in the Mt William area - the interests of the British Tobacco Company. In 1963, the British Tobacco Company managed to acquire approximately 130 000 acres (56 200 hectares) of Crown land in north-east Tasmania from the Reece Government, under what was later to be alleged as suspicious circumstances.³⁰ The initial moves to create a Forester kangaroo reserve in the north-east came from farmers, a group not traditionally involved in promoting conservation reserves, and one that often perceived native fauna as a pest. In their appeal to create a Forester kangaroo reserve, the north-east farmers drew attention to the activities of the British Tobacco Company, which was rapidly clearing land for agricultural purposes.³¹ It is possible that there was some ill-feeling amongst farmers, generated by the extensive land deal made between the Government and the British Tobacco Company and that this agitation played a significant part in the farmers' support for the Forester kangaroo reserve proposal.

A member of the ABPB, who was personally acquainted with the Manager of the British Tobacco Company in Sydney, conveyed the Board's views on the Mt William area to the Company to ascertain their feelings on the proposal. The Company's Pastoral Manager, Mr Lewin, was sent to Tasmania to further investigate the intentions of the Board, which it was thought could be of concern to the Company's development plans in the area. In a meeting between Lewin and the ABPB in February of 1968, Lewin requested that the Board inspect other areas north of Mt Cameron and bordering on the Boobyalla River as a possible alternative.³²

In October, 1968, the Curator of the ABPB and the Property Manager of the British Tobacco Company (Howard) made inspections of the dune country to the north-east of the Boobyalla River and the Mt William area to assess their suitability for reservation. The British Tobacco Company favoured the Boobyalla alternative, but the Board was convinced that the Mt William area offered the most suitable land and habitat for the purpose of conserving the Forester kangaroo.³³

The Board argued that the land in the Boobyalla area was very marginal to the main concentration of Forester kangaroos and it consisted largely

of poor quality sand dunes. Much of the land was low-lying and wet and known to present excessive health problems for sheep. The heavy fluke infestations which affected sheep were also known to pose a threat to Forester kangaroos. Furthermore, the land was fragmented by mineral and agricultural development, with easy access and pressures from human activities, including shooting. There were also fears that a highway was planned to run along the periphery of the area in the future. Overall, in the opinion of the ABPB, the land did not compare in suitability with that around Mt William.³⁴

A reservation of about 10 000 acres (4 050 hectares) was suggested to be the minimum size required to conserve the Forester kangaroo. The Board made application to the Surveyor General for financial assistance to acquire the land in June of 1969, but loan fund requirements had already been passed by treasury for the next financial year. In the meantime, the Tasmanian Farmers' Federation put further pressure on the Board to establish a Forester kangaroo reserve.³⁵

The Board resubmitted their estimates for land resumption in the Mt William area in the 1970/71 financial year. Accompanying this were plans for a reserve of approximately 13 000 acres (5 260 hectares) including the Mt William area. This comprised the 10 000 acres (4 050 hectares) selected by the Board as prime habitat and two creek systems bordering the northern and southern ends of this area. The creek areas were included to provide physical barriers and aid in the control of illicit entry into the proposed reserve by vehicles and shooters.³⁶

In the meantime, the British Tobacco Company had been steadily clearing land and in the next year, the Company planned to clear in the proposed Forester kangaroo reserve area. The rate of land clearance was estimated at around 8 000 acres (3 240 hectares) per annum.³⁷ Given this great surge of agricultural clearing the Board appealed to the Government that the Mt William area, "...presents the best and last opportunity available for habitat reservation on the scale needed to protect the ecosystem of the region".³⁸ Fortunately, the Surveyor-General was greatly in favour of the reserve and suggested that in addition a further area of coastal heath and wetlands to the north-east of the proposed reserve could be added. While agreeing with this idea,

the Board resolved to proceed with having the original area reserved as a matter of urgency, then investigating the addition of other areas at a later stage.³⁹

In the early months of 1970, the matter was largely taken over by the Ministers responsible and the Director of Lands. The ABPB did not have the authority to negotiate transactions in land, and with a delay in available finances and increasing concern from the conservation movement, including interests from the Australian Conservation Foundation, it was handed to the Government to pursue the matter.⁴⁰

In support of the proposal and with pressure from interested parties, the Government entered into high level negotiations with the British Tobacco Company. This resulted in the Company agreeing to release one of three possible areas for a reserve, including Mt William, but this was its least preferred alternative. These options were referred to the recently formed National Parks and Wildlife Advisory Council. The Council recommended that the least preferred option of the Company (the Mt William area) be selected and as much of option two, the Boobyalla area, as could be negotiated, should be set aside as a reserve. The considered expert opinion was now that at a minimum area of 25 000 acres (10 100 hectares) was required to protect the Forester kangaroo and that the 13 000 acre (3 240 hectare) Mt William reserve proposal should be extended.⁴¹

While negotiations were taking place, the British Tobacco Company was involved in a court case over alleged conspiracy against company personnel. In 1970 the Bethune Government questioned the way in which British Tobacco had acquired Crown land for their project. Serious allegations were made about the transfer to the Company of about 130 000 acres (52 600 hectares) of Crown land in 1963 and breaches of law involving the Premier (Eric Reece), the Commissioner of Lands (Doug Cashion) and British Tobacco Company personnel.

■

At the instigation of a Government interdepartmental committee, a six month investigation by police resulted in the recommendation that proceedings be instituted against the Company. The arrangement between the British Tobacco Company and the then Government was

that the land was to be fully developed and an agreed portion was then to be subdivided and offered to private individuals at a price to be agreed upon by the Company and the Government. Police investigations revealed that there was very limited documentation regarding the land deal in Government files and grave breaches of the Crown Lands Act were suspected.⁴²

However, with insufficient evidence, the case was dismissed and the Bethune Government, in the belief that the development would be beneficial to the State, passed validating legislation (the North East Land Development Act, 1972).⁴³ By 1972 the British Tobacco Company had spent around \$4.3 million on acquiring land, drainage, purchasing livestock, fencing, housing, farm buildings and improving marginal land to produce pasture. Approximately 10 000 head of cattle and 33 000 sheep were "...running on land once considered worthless".⁴⁴

Although the case did not proceed, the negative publicity is likely to have weakened the Company's position and aided negotiations for the Forester kangaroo reserve proposal. An agreement was made whereby the Company would surrender their interests to the east of Mt William. This was accepted by the NPWS, conditional on it being incorporated with some land to the south of this area, currently under lease by the Stanton family.⁴⁵ The Stanton leases were acquired and reproclaimed as Crown land in June, 1973.

There was now opposition to the proposed reserve from the Forestry Commission as some of the land in the area was under licence by Tasmanian Pulp and Forest Holdings Ltd (TPFH). The Forestry Commission was arguing that it had not been established that the taking of pulpwood would constitute a threat to the Forester kangaroo and was requesting that the licence be allowed to continue. The area under question was below the 41°00' parallel and comprised the recently acquired Stanton leases.⁴⁶

The NPWS was adamantly against the idea of allowing forestry activities within the reserve and said that the Forestry Commission had already agreed to the proposed reserve boundaries. However the Commission replied that at no time had they agreed that the reserve

should encroach upon the pulpwood area of TPFH. When the North East Land Development Act of 1972 was passed to allow British Tobacco operations to proceed, TPFH had relinquished their rights to a portion of their pulpwood area on the understanding that no further revocations from their concession would be entertained. With this in mind, the Commission threatened to strongly oppose the inclusion in the reserve of any area south of the 41°00' parallel.⁴⁷ The NPWS requested that the Forestry Commission reconsider this matter as it was a comparatively small area and the Eddystone Lighthouse road in the south formed an ideal boundary for the fenceline of the kangaroo reserve.⁴⁸ However, with pressure from industry, the Forestry Commission refused to consider releasing the area.

In September 1973, the Executive Council approved the proclamation of 8 640 hectares (21 350 acres) as Mt William National Park. The objections of TPFH and the Forestry Commission were upheld and the southern boundary of the reserve ran along the 41°00' parallel. The NPWS still wished to acquire the contested land south of the reserve boundary and requested that the Forestry Commission and TPFH make a detailed examination of the area. The result was that the area under question was not found to be particularly valuable after all and the land was excised from the TPFH Licence in February 1974.⁴⁹

Although named Mt William National Park, Mt William was not actually within the reserve and the North-East Tasmanian Field Naturalists suggested a change in nomenclature to avoid misleading the public. An alternative mooted by the Club was 'Cape Naturaliste National Park', and if that was not acceptable, they suggested the NPWS investigate the possibility of altering the boundary of the reserve to include Mt William.⁵⁰

In 1975, the NPWS proposed a southerly extension of the Mt William National Park to encompass the 500 acre (200 hectare) Eddystone Lighthouse Reserve, the area of Crown land formerly leased by Stanton and subject to the TPFH concession, and an area of freehold land comprising a sand spit at the mouth of Ansons Bay. The Ansons Bay Progress and Planning Association had alerted the NPWS to the advertised sale of 232 acres (94 hectares) of land on the sand spit as

investment or subdivision land. The Association considered the area unsuitable for subdivision and suggested to the NPWS that this was an opportunity to extend the reserve.⁵¹ The proposal was referred to the Mines Department and the Town and Country Planning Commission, and neither raised objections to the extension. The Forestry Commission initially objected to the idea, but soon after had approximately 1 000 acres (405 hectares) of land south of the Eddystone Point road released from the TPFH concession for inclusion in the national park.⁵²

The British Tobacco Company announced in 1977 that it had completed extensive development of its lands and was now releasing a portion of these for sale, in accordance with the provisions of the North East Land Development Act 1972. The lands comprised an area of 51 000 acres (20 640 hectares), subdivided into eight blocks, adjacent to the western boundary of Mt William National Park. The Government was given first preference to purchase any or all of these blocks.⁵³

The NPWS requested Government approval to acquire the land, which comprised part of the original proposal for the Forester kangaroo reserve made in 1972. The NPWS argued that much of the existing Mt William National Park was not ideally suited to the Forester kangaroo (which preferred more open country) and that it was considered essential to substantially extend the reserve to ensure the survival of this species.⁵⁴ In total, the land was valued at \$1.75 million, and application was made to the Federal Government for financial assistance under the States Grants (Nature Conservation) Act. However, Federal funds were not forthcoming, largely due to the high costs involved.

A number of alternative combinations of lots that could be purchased were mooted and Cabinet approved the purchase of a portion of Lot 8.⁵⁵ However, the NPWS preferred Lot 2 as it was adjacent to the north-west boundary of the national park and contained Mt William. This was agreed upon and 3 200 hectares (7 900 acres) was purchased for \$250 000. The remaining blocks went to public auction where only one sold for \$86 000. The Government was accused by the Opposition spokesman on the Environment of paying more than double the amount it should

have for the land - the purchase price was more than \$31/acre, whereas land sold at auction was only \$12/acre.⁵⁶ However, the reserve was now significantly enlarged and Mt William was now included in Mt William National Park (Figure 4.2). Other small areas were later added to the reserve as land became available for purchase and acquisition funds could be secured.

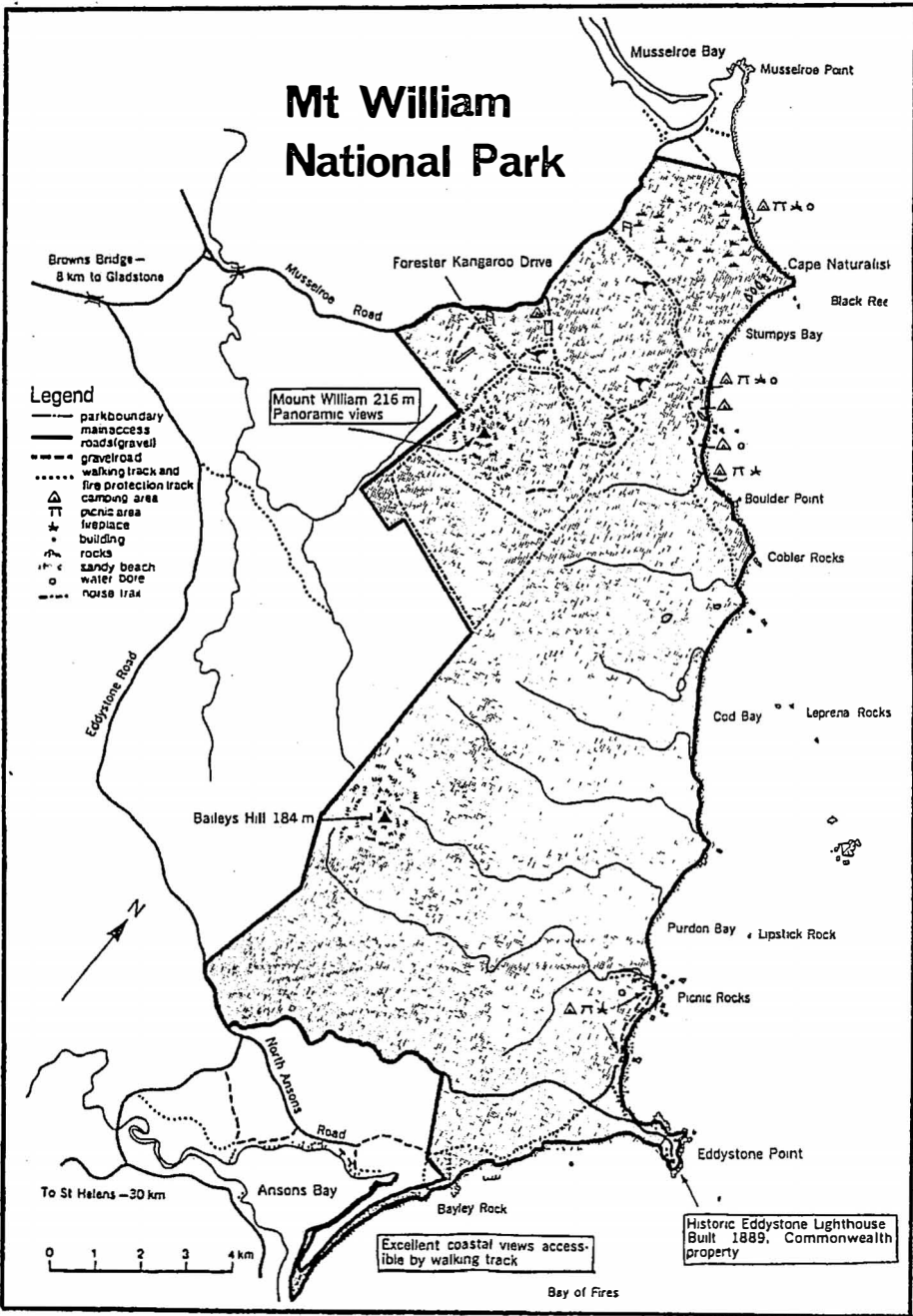


Figure 4.2: Mt William National Park. Source: National Parks and Wildlife Service (undated). *Mt William National Park*. National Parks and Wildlife Service, Sandy Bay, Tasmania (brochure).

■ Asbestos Range

In 1938 a proposal for a national park of 5 000-6 000 acres (2 020-2 430 hectares) in the Asbestos Range area (north coast of Tasmania) was made by the Beaconsfield Council.⁵⁷ When the matter was referred by the SPB to the Mines Department, objections were raised as the area was potentially mineral bearing, the Secretary for Mines stating, "... it is not considered advisable to exclude its possible investigation by locking it up as a Scenic Reserve".⁵⁸

The Mines Department suggested that a smaller 20 chain (400 metre) strip along the coastline would be more suitable for a reserve in this area. In response, the Beaconsfield Council proposed the reservation of a reduced area of approximately 2 000 acres (800 hectares) over the Badger Head Range adjoining the sea coast. The reasons mooted by the Council for the reserve were that the area boasted magnificent views, it would make an excellent sanctuary for game, and it was desirable to reserve the area in its natural state for later possible development as a tourist attraction in the North.⁵⁹

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Due to continued protests from the Mines Department, this early proposal did not go ahead. Nevertheless, it was marked on survey charts that the land under question was not to be sold. Over the next three decades, no further moves were made from the Beaconsfield Council or any other group or individual to establish a reserve in the Asbestos Range area. However, in 1971 an application was made by a Mr Robert Small to purchase Crown land in the vicinity of Badger Head/Asbestos Range. This sparked renewed interest in the creation of a permanent reserve in this area.

The application from Small was met with Government resistance. The Conservation Officer of the Lands Department recommended that the 300 acres (120 hectares) in question be retained by the Crown, as the seaward half of the lot contained high and unstable dunes, backed by scrub. Further to this it was recommended that no Crown land within half a mile of the coast in the area (between Greens Beach and Port Sorell) be alienated pending a detailed investigation of the recreation

and conservation requirements of the Tamar (Launceston area) and North West regions.⁶⁰

The proposed sale of land, which was planned for speculative five acre subdivision, was referred to the NPWS by the Town and Country Planning Commission, as there was increasing pressure from the applicant to reverse the decision to disallow the sale. The Town and Country Planning Commission was concerned that the development of this "attractive scenic area" for public use should not be prejudiced by the premature subdivision of the land and consequent shack development.⁶¹

With rumours afoot of possible land development in the area, the Northern Branch of the Tasmanian Conservation Trust (TCT) met with the Beaconsfield Council and the Beaconsfield Rotary Club to discuss the idea of creating a Regional Park in the Asbestos Range area.⁶² There was also interest in the area from the North-West Field Naturalists Club and the Launceston Walking Club, members of which had for some time been investigating the area's natural values, with the view of assessing its suitability for a reserve.⁶³ With considerable local support for the reserve idea, the Tamar Valley Master Planning Authority was approached by the Conservation Trust in 1971, and the Authority agreed in principle to the reservation of the area.⁶⁴

In March 1972, the North-West Field Naturalists made an excursion to Badger Head to gather information for inclusion in a submission for a reserve at Asbestos Range. Field studies revealed a large stand covering several acres of a rare plant species, *Lasiopetalum baueri*, which was considerably more extensive than previously thought. This species, although widespread on the mainland, was only known from three isolated pockets in north-east Tasmania. The area also supported species that were not known to occur elsewhere in Tasmania, the suggestion being that they were isolated post-glacial extensions of the Eastern Australian Flora.

Other values identified by the Devonport Field Naturalists included: old copper mine shafts, argued to be of potential geological interest for school and other parties; magnificent coastal views; and heathy

wildflower country which was reported to be particularly attractive in spring. The Club's ornithologists had also been conducting a survey of birds in the adjacent Port Sorell estuary, with the view of creating a bird sanctuary, an idea which was said to be supported by the Devonport Marine Board.⁶⁵

In October 1972, a newly formed Asbestos Range Regional Park Sub-Committee submitted a proposal to the NPWS for the creation of a reserve in the Asbestos Range area.⁶⁶ The organisations represented on the sub-committee were the TCT (Northern Branch), Tamar Regional Master Planning Authority, Lands Department, Beaconsfield Council, Beaconsfield Rotary Club, Launceston Walking Club, Launceston Field Naturalists Club, Royal Society of Tasmania and the Devonport (North-West) Field Naturalists. The proposal was also supported by the Latrobe Council and the Tasmanian Tourist Council.

The major points raised in favour of the suitability of the area for reservation were that it contained: existing access roads to good views and picnic spots; good walking areas, varying from easy to rugged; good potential for club camp areas; interesting and in some cases, very rare flora; valuable geological and archaeological features; and it would make an excellent fauna reserve. The Sub-Committee argued that parks and reserves were needed as: representative areas for study; habitat for native fauna; wilderness areas for hardy recreation; natural areas within easy range of the cities for short walks and picnics; and for the preservation of historical features for the aid of tourism. The submission stated:

Asbestos Range is one of the few relatively undeveloped areas left in Northern Tasmania, and presents an excellent opportunity to establish a Park containing such a wide variety of features: beaches, cliffs, coastal plains, to natural bush on the surrounding hills.⁶⁷

The area proposed for reservation encompassed the coastline and hinterland from Port Sorell to West Head. The submission of the Committee divided the area into eight watersheds, each prioritised in importance for inclusion in the proposed reserve. The units related to distinctive environmental and administrative situations, and ranged

from what was touted as wilderness to areas of controlled forestry and extractive industry operations. The land in the proposed reserve included private property, Crown land, a picnic reserve, Crown land under purchase or lease and State Forest.⁶⁸

Although in support of the proposal, the NPWS was unable to act immediately on the submission due to a lack of staffing. A new position of Investigations Officer was being created and the service was awaiting appointment of a suitable person. However, the Town and Country Planning Commission, which was in full support of the reserve proposal, gave the NPWS assurance that they would use their planning powers "to the utmost to ensure that the national park objective would not be frustrated by the speculative subdivision of land in the meantime".⁶⁹

In 1973, the proposal was formally incorporated into the Tamar Regional Planning Authority's Outline Development Plan. The Minister for National Parks and Wildlife also agreed to go ahead with investigating the reserve proposal and discussing the matter with affected departments. In the meantime, moves were being made by the NPWS to acquire funds for the next financial year to purchase freehold land in the area encompassed by the proposed reserve.⁷⁰

■
Early in 1974, a 6 357 acre (2 573 hectare) property at Bakers Beach, 'Springlawn', was advertised for sale (this comprised 1 832 acres of freehold land and 4 525 acres under lease). The Director of the NPWS (Murrell) urgently sought Government approval and financial assistance to acquire Springlawn, prior to it falling under the auctioneer's hammer. The Minister for Lands and Works approved in principle the compulsory acquisition of the property and the matter was taken to Cabinet, which established an Inter-departmental Committee comprising the Chief Commissioner of Forests, Director of Lands, Director of the NPWS and the Acting Town and Country Planning Commissioner, to report on the proposal to acquire land at Bakers Beach.⁷¹ The Committee unanimously recommended the compulsory acquisition of Springlawn, the expenditure justified in the press by the Minister for National Parks arguing that there were too few national parks on the North and North-West coast of the State.⁷² The cost of

purchasing Springlawn was \$171 500, and funds largely came from re-allocation of a portion of money provided for land acquisition by the Federal Government through the National Estate Inquiry (\$141 500), with the NPWS funding the remaining \$30 000. The purchase was said by the NPWS to be "unanimously applauded", except by some trail bike and horse riders, who had previously had fairly free access to the area.⁷³

At the same time, 6 000 acres (2 430 hectares) of freehold land, including West Head and a substantial frontage onto Badger Beach, was sold by a Mr Gardener. Members of the Northern Branch of the TCT and the Tamar Regional Master Planning Authority alerted the NPWS to this sale. The property was purchased by Mr Small, an American land developer, who in 1971 had unsuccessfully attempted to purchase Crown land in the area. It was believed that the intention of Small was to undertake close subdivision of that part of the property within the proposed park.⁷⁴

Shack development was already encroaching on the area and was considered a direct threat to the values of the proposed national park. However, the NPWS had no further funds available for purchasing land. As feared, Small rapidly bulldozed a road along the eastern side of West Point and was proceeding with clearing of bush for a subdivision. These activities were undertaken without council approval. This was seen by the NPWS as a direct attempt to block the reservation.⁷⁵ The subdivision of this land was also reported to be the subject of some local public concern.⁷⁶

As a means of blocking the developer, the NPWS asked the Beaconsfield Council to reject any applications for further subdivision of land in this area and to terminate the lease in the area of Badger Head. The NPWS then proceeded to seek approval to serve a Notice to Treat (compulsory acquisition or by negotiation) on Small for the subdivided area of his land. Small, who was aware of the proposed Government purchase of his property, was attempting to bring about a *fait accompli* by destroying the natural bushland and hence the area's suitability for inclusion in the proposed national park.⁷⁷

In a turn around from their previous support for the national park, the Beaconsfield Council announced that they opposed the Government purchase of land held by Small, arguing, "...it would leave no land for sale or development in the northern section of the Beaconsfield Municipality and stop any westward development of the seaside resort of Greens Beach".⁷⁸ This stand was supported by some local land owners who were concerned that the area would be lost to other forms of development if the reservation went ahead. A Badger Head orchardist (Mr Perry), for example, argued that the land on the eastern side of the Asbestos Range was ideal for olive, grape, citrus fruit and stone fruit growing, stating, "I'm not against national parks, but put them up in the snow country and not in the frost free areas along our northern coast. Already Tasmania has more parks and reserves than Europe".⁷⁹

Bypassing the NPWS, the Beaconsfield Council lodged objections to the reserve proposal with the Minister for Parks and Wildlife. It was agreed to have an on-site meeting between the newly appointed Investigations Officer of the NPWS and representatives of the Council and the Lands Department. A compromise on the proposed reserve boundaries was reached, but when taken to Council it was not accepted.⁸⁰

The Council owned and leased some of the land behind Badger Head and Badger Beach, which it claimed to have set aside for recreation and conservation purposes, and objected to this being 'taken away' by the Government. The NPWS had increased the proposed depth of the park behind Badger Beach to encompass areas liable to sand blow and to protect the vegetation from development. Some land to the south of Badger Beach had also been noted on the Regional Plan as suitable for 'large scale industrial development', including an oil refinery to handle Bass Strait oil. The increased depth of the proposed park boundary was to provide a buffer zone to this development, but Council was objecting as the area encompassed some of their land.⁸¹

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Council also objected to inclusion of land on the eastern side of West Head, as there were ideas that this would be a suitable area for a wharf with a pipeline connecting an offshore discharge point to the proposed refinery site. However, the NPWS felt it more likely that this area

would be subdivided for holiday homes and would thus be unavailable for either industrial, recreation or conservation purposes. Murrell stated, "to leave this land in the hands of the present owner would be, in my view, extremely foolish".⁸²

The proposal included land to the west of the present housing development at Greens Beach. Council wished to allow Greens Beach to expand to the west, mainly because the unit cost of providing services becomes lower the greater the number of units served. After negotiations, the NPWS was prepared to offer a compromise on the boundary in this area, reducing it to the east.⁸³

In advising the Minister, Murrell strongly urged that the objections of Council to the reserve, with the exception of that relating to Greens Beach, be not upheld. The compromise offered at Greens Beach would allow for development expansion. Murrell stressed to the Minister the reasons for the importance of the Asbestos Range area being reserved. The area was said to contain an invaluable sample of north coast vegetation and habitat types, with a diversity of values (recreational, scenic, natural and educational) and ease of access from the main centres in the north. The only other State Reserve on the north coast was Rocky Cape, which was said to be small and entirely different in character. The Asbestos Range area was argued to present possibly the last opportunity to reserve land in this part of the State and would be the most significant reserve Tasmania was ever likely to have on its north coast. In reply to Council opposition to the size of the reserve, particularly in areas suitable for 'shack' development, it was argued that the viability of the park was to some extent dependent on its size and the suitability of its boundaries to limit the effect of external injurious agencies.⁸⁴

A deputation from the Beaconsfield Council requested that the Minister hold the land acquisition orders until after negotiations were satisfactorily completed.⁸⁵ However, the NPWS proceeded to serve the Notice to Treat on Small's property, who continued fighting against this action. In the meantime, there were growing concerns among local residents about the reserve proposal. Some landowners had heard about compulsory land acquisitions through a leak to the press and

were upset that they had not been notified by the NPWS about their proposals.⁸⁶ Although not objecting to the national park idea, some locals were reported to feel strongly about their "isolated piece of heaven", and believed it morally wrong to forcibly acquire the freehold land at Badger Head. A public meeting was called at the Beaconsfield Council to discuss the issue.⁸⁷

The Council, under pressure from local rate payers and land developers, made it clear to the NPWS that they considered the area proposed for the reserve too severe in certain areas.⁸⁸ At the Council meeting, fifty landowners unanimously passed a resolution opposing acquisition of land at Badger Head and a petition with 700 signatures was sent to the Minister for National Parks and Wildlife to this effect. Although uncertain about the fate of their own properties, it was reported in the press that, "...residents would fight tooth and nail to retain their land".⁸⁹ A delegation of Council representatives and four residents, including Small, waited on the Minister.

The passions of some property owners, whose private land was potentially under threat, were running high. One 14 year resident of Badger Head exclaimed, "our land was wilderness when we first went there, but now it is worth about \$20 000. We have put so much time and effort into clearing the land and building up a home that money could never compensate us for its loss." In the opinion of this resident, the NPWS had "over-stepped the mark".⁹⁰

Bell Respiro Pty Ltd was a major land owner between Badger Head and West Head, and approximately 717 hectares of its farm had been served with a Notice to Treat. Bell Respiro said that they were not opposed to the national park proposal, but wanted the boundaries altered so they could develop the area as holiday/resort subdivisions. In a letter to the Minister for Parks and Wildlife, the unemployment menace was used to support their stand: "...the present plan will prevent good development in the area, thereby retarding the growth of rural population centres and revenue and jobs for northern Tasmania...there is such a concept as some land being too valuable for a Park."⁹¹

Murrell and the Minister (Neil Batt) were not impressed with this plea, however, with continued pressure from Bell Respiro, they eventually agreed to amendments to the existing Notices to Treat on this property. Murrell made it clear that he was not happy with the outcome of these negotiations, but conceded he was prepared to accept them in view of the overall situation.⁹²

Objections to the Asbestos Range reserve were now being raised from other quarters. The Port of Launceston Authority, which had recently become aware of the extent of land between West Head and Badger Head proposed for inclusion in the national park, said that this could conflict with potential port and industrial developments in the area. The Authority said that for many years it had regarded some land in the general area as ideally suited for certain port oriented industry and that it should be maintained for such use. The Authority requested a meeting with representatives of the NPWS to achieve a compromise in fixing the boundaries of the proposed park.⁹³

Australian Pulp and Paper Manufacturers (APPM) was also becoming concerned at the number of areas the NPWS was seeking to have excised from its forest concession area in northern Tasmania, granted under the Wesley Vale Pulp and Paper Industries Act, 1961. Apart from land at Asbestos Range, there were other areas in the Mersey Valley and Blue Tier that were under question.⁹⁴ The Forestry Commission, which could see no real objection to releasing some of the land from the concession in this area, reached an agreement with APPM to make available 2 230 hectares of Crown land for the first stage of the national park. The Commission emphasised that this was in spite of the fact that there were many significant quantities of pulpwood in this area of vacant Crown land to which APPM had rights. However, the Commission did not recommend the revocation of several areas of State Forest proposed for inclusion in the reserve.⁹⁵

The Mines Department, which previously had no objections to the reservation, was now requesting that the proposed boundary in the Badger Head area be revised. The Department said it was now apparent that the area contained significant sand resources, which were necessary to meet the future requirements of sand for the Launceston area. The

dune sands had ideal properties for making concrete and it was argued that as existing resources in the Tamar region were nearing depletion, alternatives had to be found in the near future. These deposits supposedly represented the only accessible reserves in the area and the Mines Department opposed their inclusion in the reserve.⁹⁶

It so happened that the land under question was on the property of Bel Respiro, on which a Notice to Treat had been served. Together with the Mines Department, Bell Respiro wrote to the NPWS opposing the inclusion of this area in the national park, and urged that it be retained by the Company for commercial use.⁹⁷ The NPWS was not convinced that these were the only sand deposits available to industry in the region as comprehensive surveys had not been undertaken and the proposal to exclude this area from the national park was rejected.⁹⁸

This last attempt to prevent the compulsory acquisition of land held by Bell Respiro came at the final hour. The funds for acquisition had been made available by the Federal Government and the Notice of Acquisition to vest the land in the Crown was to be signed on that day, and would have already taken place if not for a recent ministerial portfolio shuffle.

The compulsory land purchases went ahead and on the 29 June 1976, a 3 330 hectare (8 230 acre) area was proclaimed as Asbestos Range National Park (Figure 4.3). It included 542 hectares acquired from Bel Respiro and 104 hectares acquired from Mr Small. The Badger Head shack owners debate with the NPWS continued. It was agreed that the shack owners would not be forcibly evicted, although no secret was made by the NPWS that their presence was regarded as inimical to the proper management of the park and its use by the public. Further properties were later purchased and added to the reserve through funds made available from the Environmental (Financial Assistance) Act of 1977 and the States Grants (Nature Conservation) Act of 1974.

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South-West Tasmania and the Wilderness World Heritage Area

Lake Pedder

The Legislative Council's Select Committee of Inquiry recommended in 1968 that a national park be created in south-west Tasmania and that Lake Pedder be flooded by the HEC. The new Southwest National Park was originally to cover an area of 363 000 hectares, however, this was immediately halved by the Government to 195 867 hectares. Although the South-West Committee had achieved some success, Lake Pedder was still to be flooded and the boundaries of the South-West National Park excluded a number of areas considered by the park proponents to be of high wilderness and natural values.

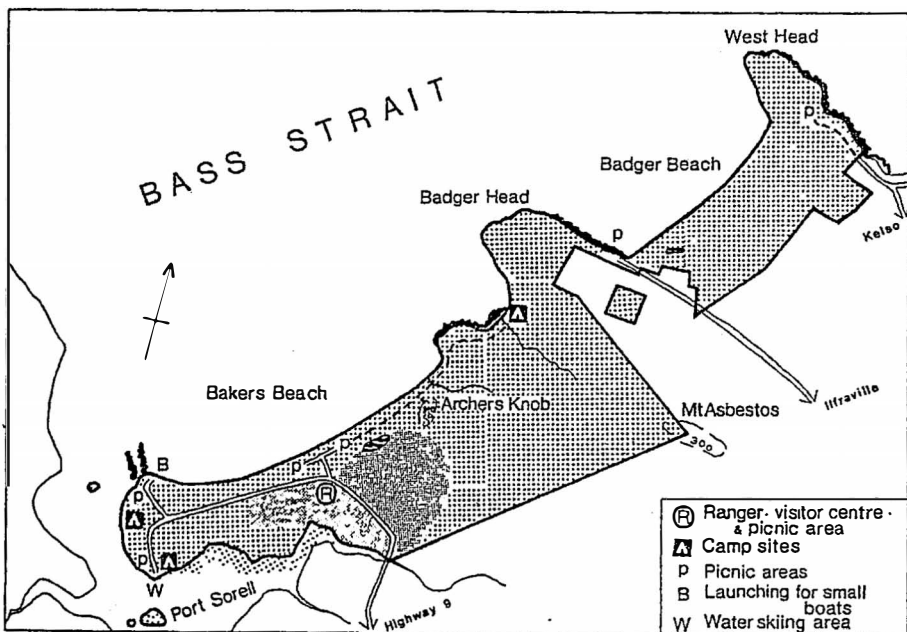


Figure 4.3: Asbestos Range National Park. Source: National Parks and Wildlife Service, 1986. *Asbestos Range National Park*. National Parks and Wildlife Service, Sandy Bay, Tasmania (brochure).

Throughout most of the Select Committee Inquiry, the HEC had maintained that there were no viable options to flooding Lake Pedder. Towards the close of the Inquiry the HEC did reveal that other alternatives existed, but these were only discussed to a limited extent and were deemed unfeasible.⁹⁹ The disappointment of the

conservationists with the new South-West National Park and the knowledge that there were possible alternative power generating options to flooding Lake Pedder, sparked renewed action.

There was already considerable public pressure on the Government by the close of the 1960s, and the State elections of 1969 saw the fall of the Reece Government, the first defeat of the Labor Party since the Great Depression. The new Liberal Government led by Premier Bethune strongly supported the HEC and the previous Government's decision to flood Lake Pedder. In fact, Bethune announced that the Lake Pedder project must go ahead as demand for electricity was expected to increase, according to the HEC's projections, by 80 per cent over the next ten years.¹⁰⁰ The HEC, which had gained an ever increasing amount of power particularly during the 1960s, had become a major political player with considerable governmental influence.

In 1971 the Pedder enthusiasts formed the Lake Pedder Action Committee (LPAC) with the specific aim of pressing for the preservation of Lake Pedder. By 1972 the LPAC was a national organisation with branches in Victoria, Queensland, New South Wales and the Australian Capital Territory. A series of nation-wide campaigns were launched to save Lake Pedder and the south-west wilderness. Over the Easter of 1971, 1 000 people protested on the shores of the doomed Lake and public interest in the issue was mounting.¹⁰¹ While action was being taken on the political front scientists and Pedder enthusiasts were rushing to gather information on the physical and biological characteristics of the Lake to provide evidence for their case for preservation.

The Bethune Government was fraught with trouble and short-lived. The State election of 1972, brought about by the resignation of the sole Parliamentary representative from the Centre Party who held the balance of power, saw a return of the Labor Party in a massive victory, again headed by Reece. In the wake of the 1972 elections, dedicated conservationists from the LPAC formed the United Tasmania Group (UTG) - Australia's first Green Party. The UTG launched a frantic election campaign, with the aim of grasping the balance of power.¹⁰² A public battle raged in the Tasmanian and national press between the

HEC and the Lake Pedder conservationists. Both sides were attempting to gain public support through promoting their cause and refuting the claims of each other. The arguments presented by the HEC concentrated on appealing to the economic interests of the individual by threatening increased electricity tariffs if Lake Pedder was not flooded and claiming the public was being misled by untruthful information presented by the opponents. The Pedder enthusiasts refuted these arguments, with advert slogans such as, "Lake Pedder. Don't be deceived by the HEC" and "Lake Pedder Can Still be Saved by You".¹⁰³

The UTG was not successful in gaining a seat in Parliament, but they did manage to accrue over seven per cent of the vote and one candidate came within a few hundred votes of being elected.¹⁰⁴ This was a clear demonstration of public support for the retention of Lake Pedder, especially considering the brevity of the UTG's election campaign, and that their candidates were previously unknown and inexperienced in the political sphere. Throughout the lead up to the election, both major parties had claimed the flooding of Lake Pedder was not an election issue, but this was not so.

The stalwart of support for the HEC, Reece, was again Premier and the door was firmly closed to the Lake Pedder activists. Searching for avenues, the LPAC then attempted to make a legal challenge on the grounds that the HEC's decision to proceed with the Middle Gordon Scheme was contrary to the provisions of the 1968 proclamation of the enlarged South-West National Park. When the Attorney-General (Mervyn Everett) granted the LPAC passage to proceed with the litigation, Reece indicated that regardless of the outcome, he would validate any possible illegality through Parliamentary legislation. Everett was furious with this lack of regard for the court and promptly resigned. Reece assumed the role of Attorney-General and rapidly took the necessary legislative steps concerning Lake Pedder. With much sympathy for Everett from within Reece's Party, he was then reappointed as Attorney-General.¹⁰⁵

By 1972 there were three Lake Pedder campaign offices in Hobart and the national campaign was gaining momentum with demonstrations and overnight vigils held in several State capitals. A petition was

presented to the Legislative Council from 200 life scientists and Reece received a petition from 17 000 Tasmanians calling for the preservation of the lake.¹⁰⁶ Despite this, Reece was not to be shaken and there was clearly no hope in the State Government affecting a change in its Lake Pedder policy. The LPAC directed its energies to the Federal political arena to override the decision to flood Lake Pedder.

Scientific studies into the Lake Pedder area were yielding results and these were published in a book for preservation, entitled *Lake Pedder: Why a National Park Must be Saved*.¹⁰⁷ Contributors included the Australian Conservation Foundation (ACF), LPAC/UTG, and scientists from Tasmania and other Australian States. Sixteen organisations including international and national groups were listed as supporting the retention of Lake Pedder in its natural state. The arguments for preservation largely centred around the biological and physiographic uniqueness and beauty of the lake, as well as its recreational potential. Studies identified 17 endemic plant and animal species, including a number previously unknown and rare, and unique lake and dune formations set in a rugged landscape valued for hardy recreation.

While this and numerous other documents were specifically designed to promote the case for Lake Pedder, they also reflected a strengthening focus on the wilderness conservation theme. Lake Pedder comprised one part of a larger south-west Tasmania temperate wilderness area that was increasingly regarded as requiring urgent protection from the despoilers:

The nature of the terrain, its isolation and its untouched character, determine that its best property is as a magnificent wilderness. For this reason it must be reserved undamaged for future generations who have no voice in this current argument.¹⁰⁸

With intense pre-election lobbying from the LPAC, the ACF and much public pressure, a new Federal Labor Government led by Gough Whitlam announced a Committee of Inquiry to examine the Lake Pedder case. By the time the Committee was appointed, the flooding of Lake Pedder had already begun (late 1972). Reece and the HEC refused to participate in the Inquiry as they considered this a matter for

Tasmania only.¹⁰⁹ In June 1973, the Committee of Inquiry released its final report, in which a five year moratorium was recommended to allow the restoration of Lake Pedder and modification of the Middle Gordon Power Scheme.¹¹⁰ The Federal Government supported the findings of the Inquiry and made an offer of \$8 million to the Tasmanian Government to upgrade the Bell Bay thermal power station to meet increasing electricity demands. Despite the public and political pressure to preserve Lake Pedder, the Reece Government and the HEC rejected this offer and the flooding proceeded.¹¹¹

While the HEC continued to wield power, one of the results of the Lake Pedder issue was a growing lack of trust in the HEC and the Government: "...the aura of holiness which had for so long surrounded the HEC was being dispersed by the Lake Pedder people and their allies".¹¹² Another significant result was an increase in the level of organisation and political clout of the conservation movement, backed by a growth in public interest and participation. The conservationists had emerged as a political force, and scarred by the flooding of Lake Pedder, their attentions now turned to the protection of the remaining wilderness in the south-west of Tasmania.

The South-West:

First phase of expansion

In 1975 an Australian Labor Party State Conference in Launceston passed a resolution that no candidate over the age of 65 would be eligible for pre-selection. As a result, the aging Premier Reece was forced into resignation in April of that year. Reece's successor was Bill Neilson, who instituted a programme of change in public service procedures and planning. There was some concern from within the Government that major decisions were being made about the development of the State with very limited information. The activities of the HEC, which was now in debt to the tune of \$600 million largely from State funds, were also beginning to come under question.¹¹³ Similar concerns had been raised by the Lake Pedder/south-west activists, who had been calling for a more open government and public

consultative processes, particularly after the closed manner in which the Tasmanian Government had treated the Lake Pedder case.¹¹⁴

The natural values of south-west Tasmania were beginning to gain official recognition. In 1973, the Whitlam Federal Government established the Hope Committee of Inquiry into the National Estate, with the aim of gaining a fresh understanding of the significance of Australia's natural and cultural heritage. In the Hope Committee Report (1974), references were made to the unique status of the Tasmanian heritage, including the south-west wilderness area. The south-west wilderness had also gained international recognition from the United Nations conservation organisation (UNESCO), which considered it to be an asset of incomparable significance and value.¹¹⁵

Spurred by pressure groups, the future of the south-west of the State came under closer scrutiny. In 1975 a draft management plan was prepared by the NPWS for the South-West National Park and the Government appointed a three man South-West Advisory Committee (the Cartland Committee) to provide information on the resources and competing values of the south-west wilderness and report on land use planning of the area.¹¹⁶ The Committee consisted of Sir George Cartland as Chair (Chancellor of the University of Tasmania), a former member of the Legislative Council, Geoff Foot, and Albert Ogilvie, nephew of former Premier Ogilvie.

The Cartland Committee called for public submissions on the draft management plan for the South-West National Park. In a massive display of interest in the future of the south-west, over 120 submissions were received. These included nation-wide representations from conservation-oriented groups, industry, government departments and individuals, and varied from single page to large and detailed documents.¹¹⁷ While there was a variety of opinions expressed on different aspects of the draft management plan, the submissions broadly fell into two opposing groups: those criticising the south-west reserve boundaries and calling for an enlarged area; and those endorsing the reserve boundaries or calling for a reduced reserve area.

There had been intense pressure to include the Precipitous Bluff area (Plate 4.1) in the national park from 1971, when Mineral Holdings Australia Pty Ltd applied for a prospecting licence in the area. The reserve proponents considered Precipitous Bluff and its environs to be of high conservation value and a number of objections were lodged to the licence application by conservation groups and individuals, including the TCT, the South-West Committee, the Launceston Field Naturalists Club and the Society for Growing Australian Plants. The Special Prospectors Licence applied for by Mineral Holdings covered an area of 15 square miles (24 square kilometres) that contained limestone of very high purity with potential for use in the iron and steel industry.¹²⁰

The case against Mineral Holding's application was heard in the Mining Wardens Court in 1972. The Mining Warden found in favour of the conservationists, on the basis of the interpretation of whether users such as bushwalkers had an 'interest' in the area and hence the right to object. With the backing of Reece and the Minister for Mines, Mineral Holdings appealed this decision in the Supreme Court of Tasmania in 1973. The Supreme Court found in favour of Mineral Holdings, ruling that the objectors did not have an 'interest' in the area and the decision of the Mining Warden was overruled. The conservationists lodged a further appeal to the full bench of the Supreme Court, on the basis of legal points, but this was dismissed.¹²¹

A final objection was lodged to the High Court of Australia by the TCT, funded by legal aid and a public appeal launched by the TCT in 1975. By this time, the Precipitous Bluff case had received a considerable amount of publicity through the actions taken by the reserve proponents. Kevin Kiernan, an active campaigner for the south-west, organised an expedition to Precipitous Bluff to gather evidence for the case to preserve the area. The trip included people from every state in Australia and received much publicity.¹²² Conservation groups were also lobbying interested parties including the mining industry and the State and Federal Governments. In a cunning move to block Mineral Holdings, a member of the TCT (Pat Wessing) applied for her own prospecting licence in the area.¹²³

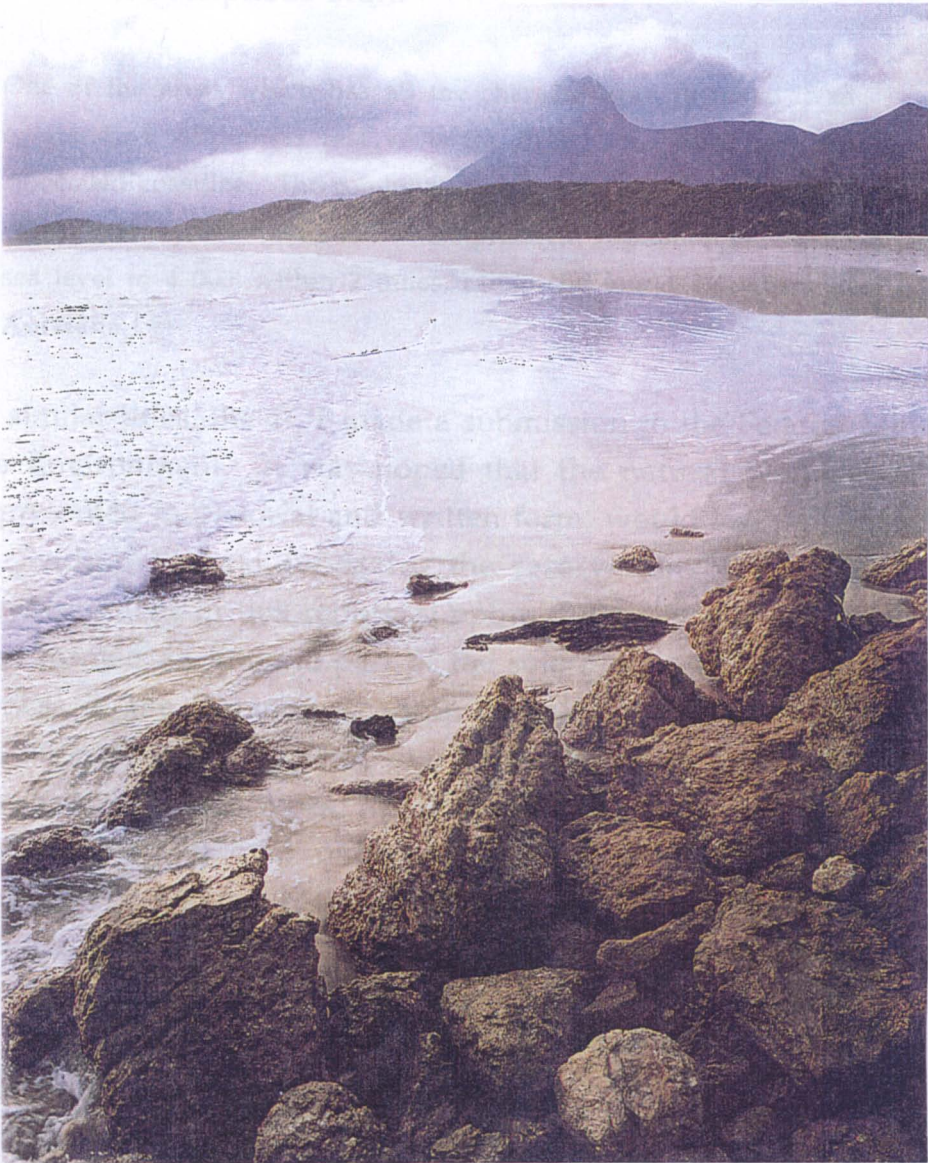


Plate 4.1: Precipitous Bluff from Prion Beach, south-west Tasmania.
Photographer: Peter Dombrovskis. Reproduced with kind permission of West Wind Press, Sandy Bay, Tasmania.

The main argument presented for the inclusion of Precipitous Bluff in the South West National Park was that it had high wilderness value. Mineral Holdings was a prospecting company with limited financial backing, and a likely developer of the limestone deposit was the mining giant of the iron and steel industry, Broken Hill Pty Ltd (BHP). The

South-West Committee wrote to BHP outlining their case for the preservation of Precipitous Bluff:

One of the areas which has all the characteristics to make it an outstanding wilderness reserve is the Precipitous Bluff and the associated coastline. The combination of river lagoons, spectacular coastal scenery, and mountain where primeval vegetation rises from sea level to 4 000' within 2 miles, cannot be found elsewhere in Australia.¹²⁴

Along similar lines, the TCT made a submission to the Federal Minister for the Environment. It was hoped that the natural wonders of the Bluff, presented in pictorial and written form, would sway the Minister into providing Federal funds for the reservation of the area. The primary argument in this report, supported also by the ACF, was that the area formed an integral part of the sole remaining large temperate wilderness in the Commonwealth. The area was also said to be of considerable scientific interest due to the presence of a sequence of undisturbed vegetation types, zoned altitudinally from sea level to 4 000 feet (1 220 metres) over only two miles (3.2 kilometres). It also contained very extensive limestone cave systems and was of great recreational value. The South Coast track, which passed by the Bluff was used by several hundred people per year. All of these values were under threat if the Precipitous Bluff area was not included in the enlarged South West National Park.¹²⁵

Although action to reserve the Bluff was sparked by immediate threats from the mining industry, its reservation would also act against the interests of Australian Paper Manufacturers (APM), which held pulpwood concession rights over the forests in the contested land. A Ministerial tour was made of the southern forests in late 1975 to assess the boundary question. Ministers were accompanied by representatives of timber industries who argued that the proposals made by the TCT and ACF would force the pulpwood and timber industries out of southern Tasmania.¹²⁶

The adverse publicity surrounding the Precipitous Bluff case and the continued pressure from conservationists did result in the Tasmanian

Government deciding at the final hour to reserve the area. However, it was felt by the Government and the Forestry Commission that APM should be compensated for its loss. In exchange, 2 150 hectares of forests in Hartz Mountains National Park was offered to APM. The deal was accepted by APM, which did very nicely as the forests in Hartz were actually of greater immediate commercial value and more accessible than those in the Precipitous Bluff area.¹²⁷ In support of the excision, APM said that this part of the Hartz Mountains National Park was well removed from the main features, which were in their opinion the peaks and lakes, and that their harvesting activities would not be visible to most visitors.¹²⁸

The boundary changes proposed in the Precipitous Bluff - Hartz swap were presented in the draft management plan for the South West National Park. Many of the conservation-oriented submissions made to the Cartland Committee deplored this proposal and urged the Government to leave Hartz Mountains National Park intact.¹²⁹ The preliminary report of the Cartland Committee released in May 1976, endorsed the exchange and recommended that the enlarged boundaries of the South West National Park, as proposed in the draft management plan, be proclaimed.¹³⁰ The Government shortly after acted on these recommendations and in 1976 Parliament approved the enlarged South West National Park boundary, bringing this reserve to 403 240 hectares, and at the same time revoked 2 150 hectares of Hartz Mountains National Park.

The High Court of Australia, which was considering the legal question of who could claim 'interest' in an area, handed down its final decision in 1977. A majority found against the conservationists and the challenge made by the TCT to broaden the legal definition of 'interest' was unsuccessful.¹³¹ By this time the Tasmanian Government had already passed the legislation that validated the inclusion of the Precipitous Bluff area in the national park, but this was at the expense of the Hartz reserve. The conservationists were outraged at the ease with which a national park could be violated and publicly denounced the exchange, accusing the Government of blackmail.¹³²

In an additional letter to the Cartland Committee, the ACF encapsulated the views of those who were disheartened by the exchange: "Such blatant ignorance of the very purpose and value of national parks and the domination of development interests is astounding".¹³³ On the other hand, the industry view was tellingly stated by Mineral Holdings in their submission to the Committee: "The Directors of Mineral Holdings Australia are puzzled that there is any proposal at all to extend the boundaries of the already huge South-West National Park".¹³⁴

While the Precipitous Bluff issue was very definitely a sore point with the conservationists, it comprised only one part of the broader south-west question. What the majority of conservation groups were proposing was a much enlarged reserve that would encompass the entire south-west and comprise a world quality national park. The ACF submitted a detailed proposal to the Cartland Committee (Figure 4.5), which was supported in many of the other submissions. The main purpose of this proposed reserve was for the protection of wilderness and the prevention of developers from further eroding the wilderness area of the south-west. The submission stated:

...South-West Tasmania is one of the great natural areas of the world and is one of the Crown jewels of Australia's natural heritage. It is considered the last remaining temperate wilderness in the world, and possesses outstanding natural landscape, aesthetic and scientific reference values.¹³⁵

The ACF also recommended to the Australian Heritage Commission that the area be listed in the register of the National Estate and as a component of the World Cultural and Natural Heritage under the 1975 Convention, to which the Australian Government was signatory. The values of the south-west encompassed in the broader wilderness umbrella were listed to include: unique plant and animal species; richness of biological diversity, including 15 per cent of south-west plant alliances that were unreserved in the State; glaciated landscapes; pristine catchments and wild rivers, including the Franklin and Lower Gordon Rivers; and high recreational values.¹³⁶

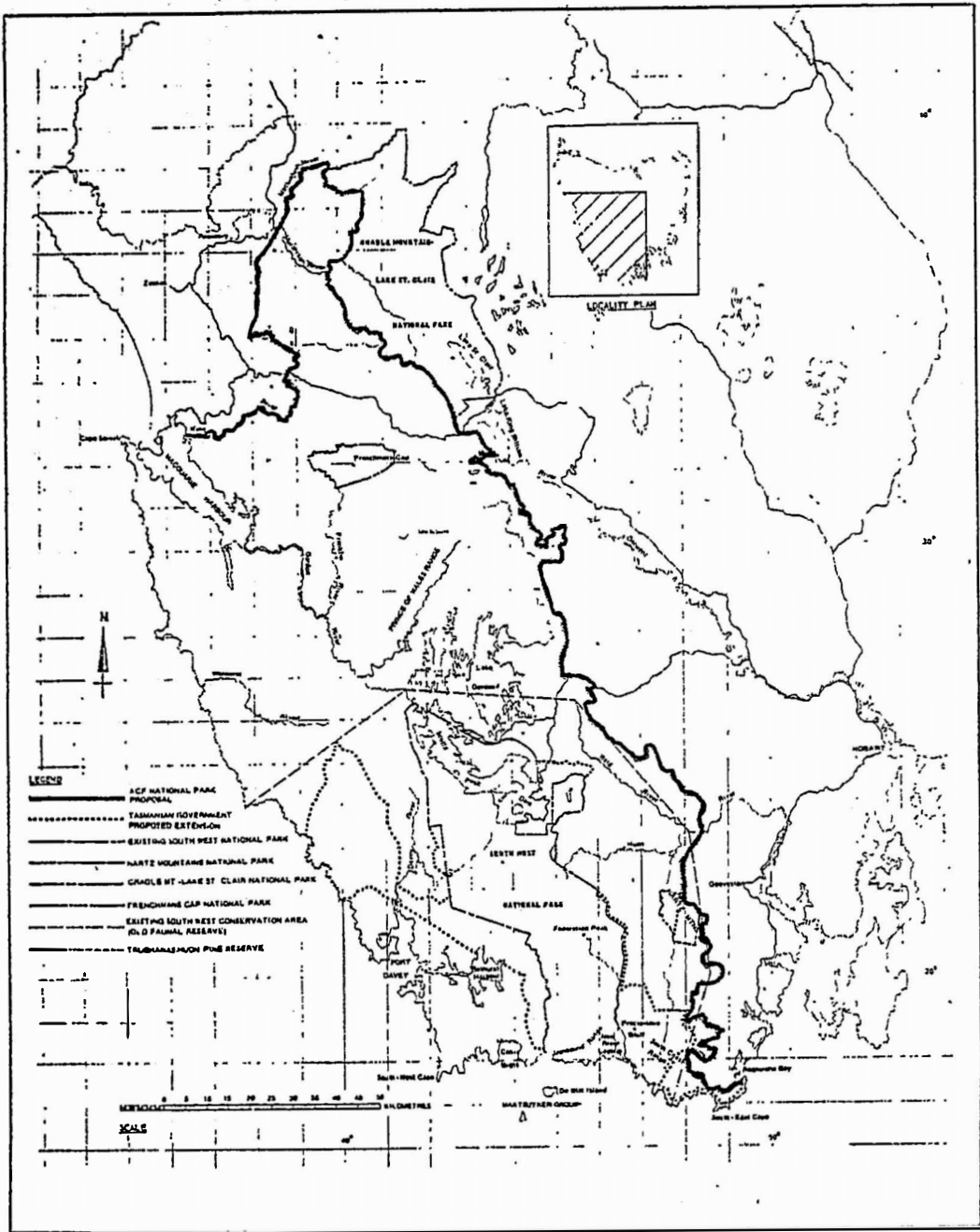


Figure 4.5: Australian Conservation Foundation's proposed boundary for the Southwest National Park, 1975. Source: Australian Conservation Foundation, 1976. Submission to the South-West Advisory Committee on the Southwest National Park Draft Management Plan.

The submissions to the Cartland Committee clearly demonstrated that the idea of wilderness had become the dominant focus of the conservation movement, and was a term used by both the proponents of a much expanded reserve and those opposing this idea. Numerous submissions referred to the wilderness of the south-west, and many of the reserve proponents took it upon themselves to educate the Committee members and the Government by providing detailed definitions and explanations of the concept and values of wilderness. The aim was to reserve the maximum area of the south-west possible in an attempt to capture the maximum area of wilderness.

The extensions to the South West National Park ratified by the Government in 1976 came nowhere near the area being sought for reservation by the conservationists. The NPWS, which was charged with the responsibility of producing the draft management plan for the south-west, was among those disagreeing with the new reserve boundary and calling for an enlarged area.¹³⁷ The International Union for the Conservation of Nature (IUCN) also appealed to Premier Nielson to protect the south-west wilderness, and endorsed the ACF's boundary proposal.¹³⁸ The Committee and the Government were accused of only including those areas that were not of potential commercial value and avoiding major conflict by siding with the developers. Industries were opposed to any further extensions to the reserve and some found the 1976 additions too severe. It was the opinion of the Tasmanian Timber Association, for example, that "...there is no need whatever for huge tracts of land to be reserved as wilderness".¹³⁹ Others saw themselves as responsible custodians of the south-west. H. Jones and Co. (timber merchants for IXL) wrote that the "...Forestry Commission and industry people are indeed responsible, co-operative and caring", while game hunters expressed the view that, "...the true hunter is a conservationist - he upholds the principles of conservation, he controls game populations and is supported by forestry officers".¹⁴⁰

■

The reserve proponents had also called for a moratorium on development while the Cartland Committee was deciding the fate of the south-west, but this was not granted. Roads were being extended into the southern forests, ahead of schedule, and with Lake Pedder

flooded the HEC turned its attention to other major river systems of the south-west. Investigations into Stage Two of the Gordon River Power Development Scheme were well under way. This posed grave threats to the wild rivers targeted and had the potential to seriously erode the wilderness area of the south-west.

In 1975 the Prime Minister of Australia, Gough Whitlam, was dismissed by the Governor-General and a new Liberal Government, led by Malcolm Fraser came to power. The Whitlam Government had made a commitment to Tasmania to take steps to reverse the growing unemployment trend. On the issue of unemployment, which the Tasmanian Government accused Fraser of neglecting, the State Labor Party called a snap election in 1976 and was returned to office. Part of Fraser's 1975 election promise was to assist the Tasmanian Government to establish a national park of world significance in the south-west, which would include a substantial wilderness area. In 1977 an agreement was signed between the Commonwealth and Tasmanian Governments providing funding for a large scale survey of the resources of the south-west. The South-West Resources Survey was led by Peter Waterman, a professional environmental resources consultant. The data gathered in this survey was to provide information for the final report of the Cartland Committee and comprise the basis for future decisions on the south-west.¹⁴¹

By the mid-1970s there was a growing rift within the Tasmanian conservation movement. The South-West Committee, the main force behind the original proclamation of the South-West National Park in 1968, had been accused of going soft on the preservation of Lake Pedder, while concentrating its efforts on enlarging the national park. In his supplementary statement to the Lake Pedder Committee of Inquiry, Edward St John Q.C., referred to the South-West Committee as the 'coolmen', while the LPAC members who took over the Pedder cause were the 'visionaries'.¹⁴² The TCT also suffered a division over its Lake Pedder policy. The question of appropriate boundaries for the South-West National Park resulted in differences of opinion between the LPAC and the TCT over the size of the national park proposal. An argument ensued and Kevin Kiernan produced a map that defined the area proposed for reservation as the entire south-west - larger than the

area sought by the TCT. Dr Geoff Mosley, Director of the ACF suggested adding a section to the north to provide a continuous stretch of land adjacent to Cradle Mountain - Lake St Clair National Park. This became the boundary sought in the submissions to the South West Advisory Committee.¹⁴³ There was also ill-feeling amongst conservationists over the Precipitous Bluff - Hartz exchange as some of the more conservative members of the TCT were accused of being party to this deal.¹⁴⁴

Kiernan was instrumental in establishing the South-West Tasmania Action Committee (SWTAC) in 1974 after the Pedder campaign, to broaden the agenda to the larger south-west area, commenting, "...of the people who were involved in the core of Pedder I was the only one dumb enough to keep bashing on the main wilderness campaign".¹⁴⁵ Branches were soon after established in Sydney and Melbourne. Among members in Tasmania there was a growing sense that a more active approach was needed if they were to be successful in halting development in the south-west. In July 1976 the Tasmanian Wilderness Society (TWS) emerged out of a small gathering of the South West Tasmania Action Committee held in Bob Brown's house at Liffey in northern Tasmania. This squared the focus on wilderness and was a move designed to keep this word in the public eye. Kiernan, who had suggested the formation of the TWS, was elected as its first Director.¹⁴⁶

From 1974 onwards there was a conscious effort made by conservationists to explore and gather information on the south-west. This was politically motivated and the glories of the wilderness were reported through the media, in print and on celluloid.¹⁴⁷ The journey down the wild Franklin River was undertaken by a number of enthusiasts, seeking new discoveries and gaining inspiration. In 1976 Bob Brown made his first trip down the Franklin, an experience which he described as the best few days of his life, and which provided him with a commitment to save the Franklin. Brown had been an active protestor during the Lake Pedder conflict and in 1978 became Director of the TWS, giving up his medical practice to devote his energies to the Franklin River/south-west wilderness campaign.¹⁴⁸ At the same time, Kiernan and others were discovering numerous new caves (over 100)

along the Franklin, some of which they were tactically naming after politicians. Amongst these was a cave (Kutakina - originally named 'Fraser') that was to later reveal some of the oldest and most significant archaeological finds in the nation.¹⁴⁹

Premier Neilson resigned from office in November 1977 and Doug Lowe was sworn in. As part of his program of review, Lowe requested information from the HEC on their future power developments. For over ten years the HEC had been conducting investigations along the Gordon, King and Franklin Rivers, at a cost of \$6.8 million, and had plans for a Gordon below Franklin Power Development Scheme and a Gordon above Olga Power Development Scheme. The HEC was due to decide on which scheme would go ahead by mid-1979, but the word was that the Franklin River would be inundated.¹⁵⁰

During the 1970s the HEC had experienced some serious budgetary blow-outs. The capital cost of the Pieman River Scheme on the west coast, which began in the early 1970s, had escalated from \$114 million to \$404 million by 1978 and the HEC was the major recipient of State Government loan funds. Lowe established an Energy Advisory Committee to investigate the HEC, and had an agenda of bringing the HEC under Ministerial control, an idea deplored by the Commission.¹⁵¹

The final report of the Cartland Committee (which included extensive documentation from the South-West Resources Survey) was presented to the Government in November 1978.¹⁵² Although conservation groups had been pressing for a much enlarged national park in the south-west to protect wilderness values, the Committee did not recommend any further expansions to those made in 1976. The Committee did regard the South-West National Park as a unique natural asset of World Heritage value and recommended an enlarged Conservation Area around the national park to provide a buffer zone. However, the expanded Conservation Area offered little real protection from development to the remaining south-west wilderness and the Committee's recommendations were universally rejected by conservation groups.¹⁵³ With the HEC planning to construct more dams in the south-west and a growth in activity in the forest and

mining industries, there were real threats to the south-west wilderness area that required urgent attention.

Second phase of expansion - wild rivers

In October 1979, the HEC presented Lowe with its Report on the Gordon River Power Development Scheme Stage Two. The prime recommendation of the Report was for a Gordon below Franklin Power Development Scheme, involving a dam on the Gordon River below its junction with the Franklin River, together with the Lower Gordon and Olga Rivers. Two major schemes were outlined: the Gordon above Olga Power Development Scheme; and the Gordon below Franklin Scheme (Figure 4.6).¹⁵⁴ Although Lowe had requested the HEC investigate alternative power generating options, these were not discussed in significant detail in the Report and the HEC was of the opinion that there were no valid alternatives to its proposed power development schemes.¹⁵⁵

Moves by conservationists to save the Franklin River began in earnest prior to the release of the HEC's final report. The TWS launched its "Don't Flood the Franklin" campaign early in 1978 and the ACF made "A Halt to Development in South-West Tasmania" its major national campaign for 1979.¹⁵⁶ The TWS, ACF and the IUCN urged the Tasmanian Government to establish a large national park in south-west Tasmania. The Tasmanian and national campaigns were in full swing and the values of the wild Franklin River (Plate 4.2) were widely publicised in an effort to draw attention to its plight and sway public opinion towards its salvation. All forms of media were used to disseminate information and generate interest in the Franklin and wild rivers of the south-west wilderness. By early 1979, the national press was pitching that the Franklin was destined to become the centre of the biggest conservation battle in Tasmanian history.¹⁵⁷

With the HEC's recommendations handed down, the Lowe Government was faced with making a decision on future power development in Tasmania. There was intense pressure from the conservation lobby to reject the proposed HEC developments and to preserve the wild rivers of the south-west. There was also mounting

pressure from the pro-developers to proceed with the dams project, in particular the favoured scheme of the HEC - the Gordon below Franklin Power Development Scheme. Information about the dams debate was disseminated to HEC employees through the Hydro Employees Action Team (HEAT), which had an ultimate objective of ensuring the implementation of the Gordon below Franklin Scheme. At the instigation of the Tasmanian Chamber of Industries, the HEC was also publicly supported by a group of thirteen bulk electricity consumers in the State.¹⁵⁸

In the midst of the debate the NPWS proposed the establishment of a Wild Rivers National Park, which would encompass the area proposed for HEC development.¹⁵⁹ The idea was raised by the Director (Murrell) at an opportune time and was to prove highly significant for the future of the area. The prime recommendation was that the Tasmanian Government recognise the wilderness values of the Franklin and Lower Gordon Rivers by proclaiming their catchments as a national park. The NPWS was cautious in taking this political path, given the momentous decision that was about to be made by the Government, but felt compelled that as the State's nature conservation authority it should present a case for conservation. The NPWS argued that Tasmania did not have an entire river system protected in a national park and that the Franklin and Lower Gordon were the last remaining free flowing rivers in the State. The area recommended for reservation would follow the watershed of the Franklin River and Gordon River, below the existing Gordon Dam (Figure 4.7) and was argued to have outstanding natural, cultural and recreational values. The economic value from a tourism point of view was also stressed.

Another significant aspect of this proposal is that it would link the South-West National Park with the Cradle Mountain - Lake St Clair National Park in a continuous stretch of reserved land, thus moving closer to the area sought by conservation groups for reservation. The proposal stated that in conjunction with existing national parks,

...the Franklin-Lower Gordon National Park would form the largest and most viable ecological reserve in the State and one of the great wilderness parks of the world.¹⁶⁰

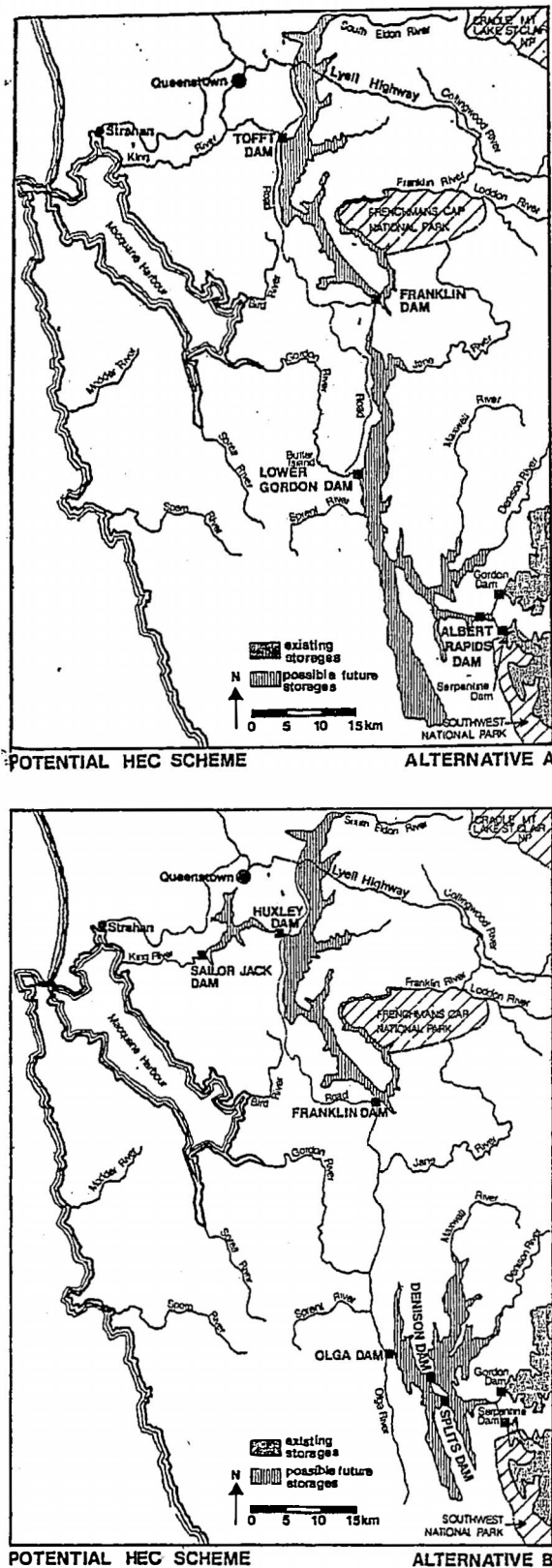


Figure 4.6: The Hyrdo-Electric Commission's proposed Gordon River Power Development Scheme, Stage Two, 1979. Alternative A - Gordon below Franklin; Alternative B - Gordon above Olga. Source: Tasmanian Wilderness Society, 1978. *The Franklin: Tasmania's Last Wild River*. Tasmanian Wilderness Society, Hobart, Tasmania, pp13 and 15.

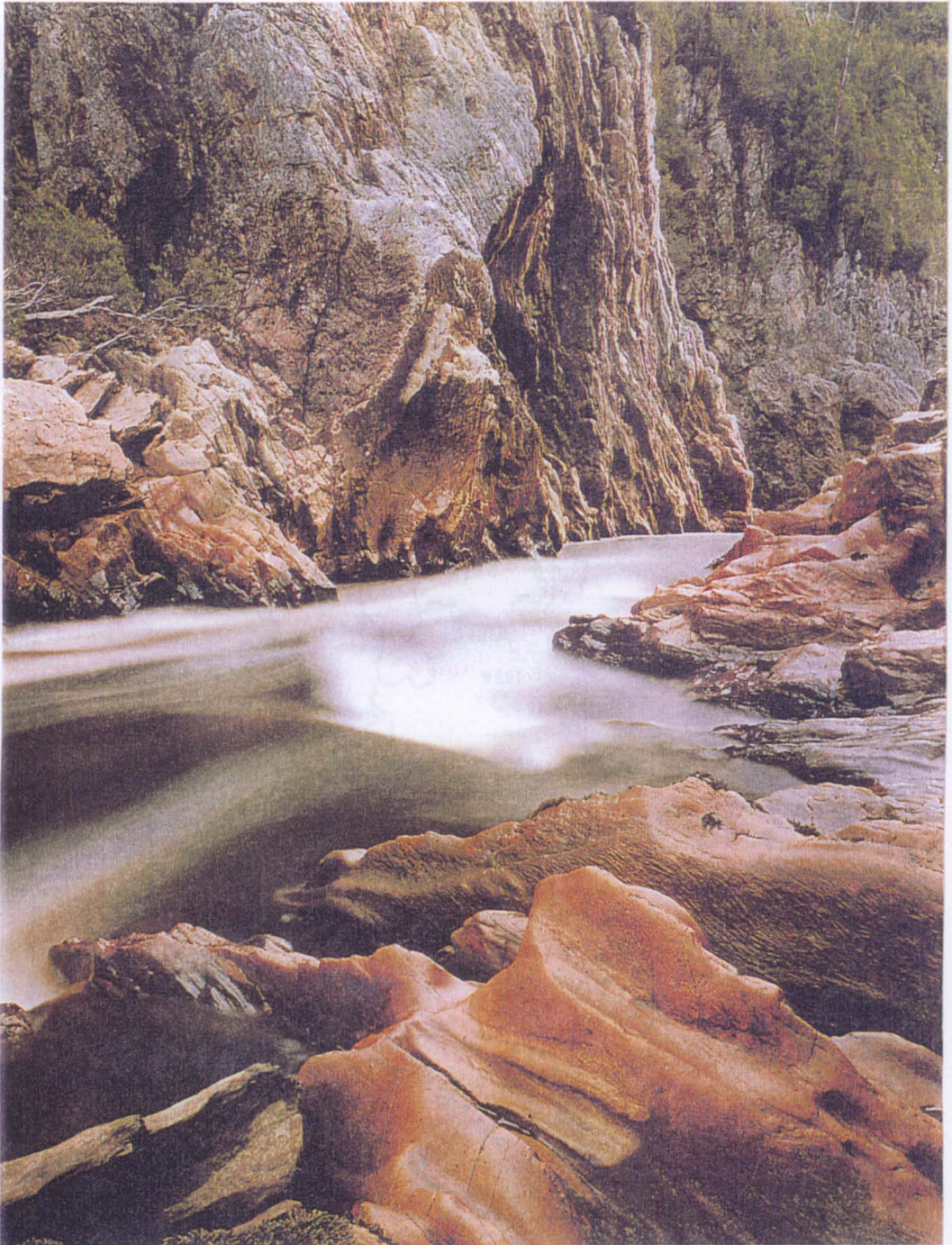


Plate 4.2: In the Great Ravine, Franklin River. Photographer: Peter Dombrovskis. Reproduced with kind permission of West Wind Press, Sandy Bay, Tasmania.

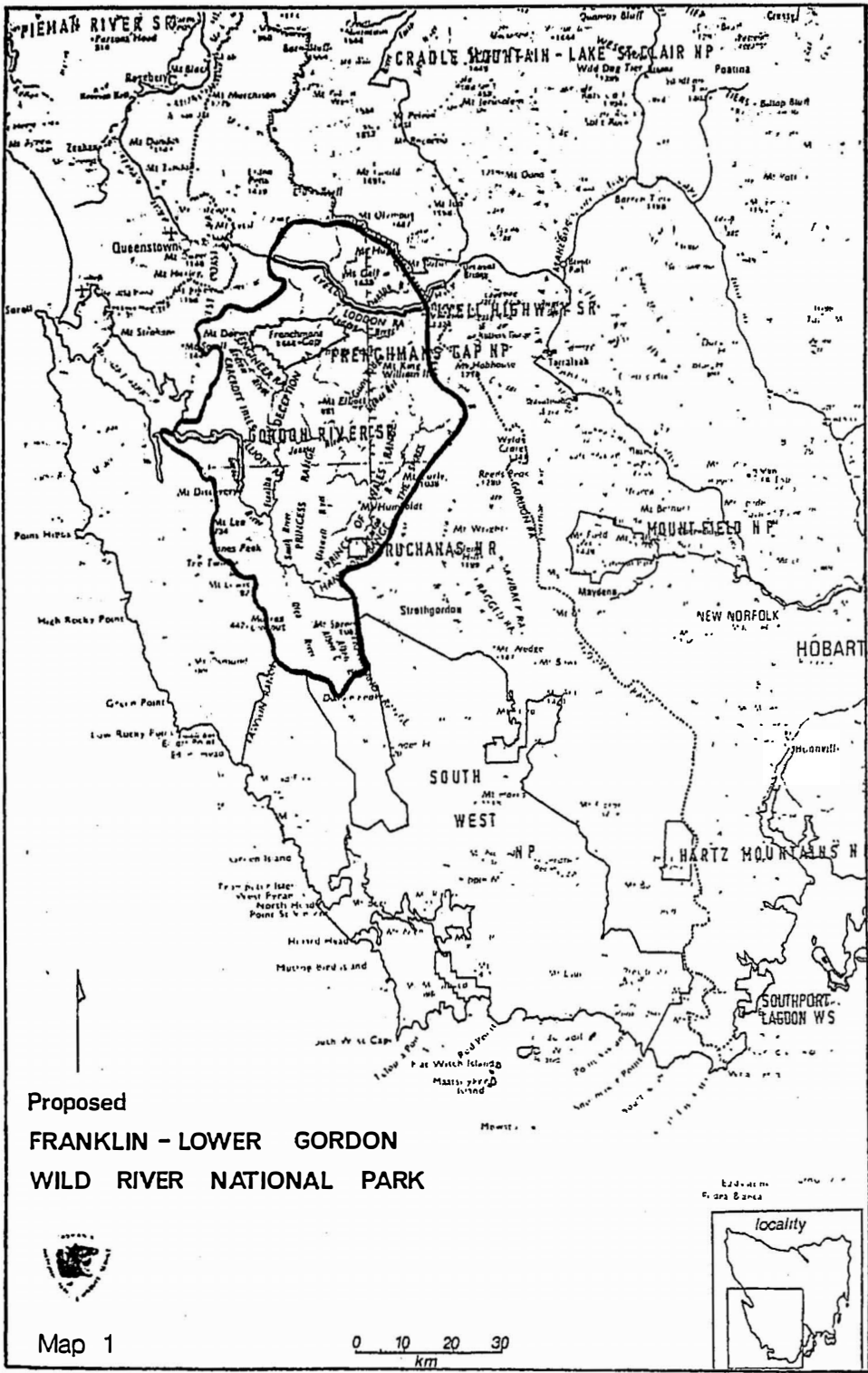


Figure 4.7: The National Parks and Wildlife Service's proposed Wild Rivers National Park, 1979. Source: The National Parks and Wildlife Service, 1979. *A Proposal for a Wild Rivers National Park: The Franklin - Lower Gordon National Park*. A submission to the Minister for National Parks and Wildlife.

The fate of the wild rivers was to be determined in a critical two day Cabinet meeting scheduled for 8 July 1980. In the lead up to this meeting there was intense lobbying by both pro-dams and anti-dams groups to pressure the Government to support their causes. The TWS organised a rally in Hobart which was attended by 6 000 people and Brown pledged that no more dams would be tolerated in the south-west. This was interrupted by HEC employees waving placards with slogans such as, "Keep warm next winter, burn a conservationist".¹⁶¹ The TWS presented a petition to Parliament with 60 000 signatures to save the wild rivers and the HEC supporters sent 22 000 letters to members of Parliament to dam the rivers.¹⁶² The NPWS began a major advertising and promotional campaign for its Wild Rivers National Park proposal, aimed at short-circuiting the HEC.¹⁶³ A huge public debate raged in the media.

Out of the enormous amount of information now in circulation on the issue, Lowe provided Cabinet with five options for the State's future energy strategy. These included the major hydro-electric developments proposed by the HEC, combinations of large and small hydro developments, a mixed thermo-hydro power development programme, and the cessation of hydro power in favour of thermal power development.¹⁶⁴ After much deliberation, Cabinet decided on the Gordon above Olga Scheme and to establish a Wild Rivers National Park, as proposed by the NPWS, to conserve the Franklin River part of the south-west wilderness.¹⁶⁵ The Government had made a compromise, but it was one that did not satisfy either the pro-dams or anti-dams lobbies.

The legislation to validate the Gordon above Olga Scheme was passed by the House of Assembly but the Legislative Council refused to pass the Bill and Parliament was locked over the issue. Members of the Legislative Council attempted to force the Government into accepting the alternative scheme - the Gordon below Franklin. In a test of constitutional strength the Council voted to dissent from the ruling of its President that the Upper House had no power to change the Bill to provide for the Franklin, rather than the Olga Scheme.¹⁶⁶ While this eventually proved unsuccessful, Lowe was furious and accused the Legislative Council of "...prostituting constitutional democracy".¹⁶⁷

The HEC made public attacks on the Government. Reece, who had been directly in contact with Party members over the issue before the decision was made, was now actively working against the Labor Party in the public arena. He formed the Association of Consumers of Electricity (ACE) to work for the implementation of the HEC's preferred scheme and was joined by former Premier Bethune and former HEC Commissioner, Knight. There was much pressure on the Labor Party to reverse their decision from groups including ACE, HEAT and the major bulk consumers from the Tasmanian Chamber of Industries.¹⁶⁸ At the same time there was growing national pressure from the conservation lobby to reject both of the HEC's proposed schemes and for no more wild rivers to be dammed.¹⁶⁹

In an attempt to break the Parliamentary deadlock, Lowe sought an alternative means of formalising the Cabinet decision. The NPWS proposal for a Wild Rivers National Park provided a possibility. The State Government had the Franklin-Lower Gordon Wild Rivers National Park proclaimed in an attempt to remove the availability of these rivers for future inundation and nominated the south-west wilderness for World Heritage listing.¹⁷⁰ The Parliamentary Labor Party then called a referendum to break the deadlock between the Legislative Council and the Government.¹⁷¹

However, by this time, there was growing dissent within the Labor Party, particularly as pressure from the pro-dams lobby intensified. In June 1981, a hostile crowd of 400 HEC workers assembled on the lawns of Parliament House and handed Lowe a petition calling for his resignation for failure to support the Gordon below Franklin Scheme. The strength of opposition, from a group comprising part of a traditional union support base of the Labor Party, was having an influence on members of the Government. A number of Party members began to move in favour of the Gordon below Franklin Scheme. This ultimately resulted in a leadership challenge and in November 1981, Lowe was forced into resignation on a vote of lack of confidence in his abilities as Premier and Harry Holgate assumed the leadership.¹⁷²

In the meantime, there was growing national and international support for saving the Franklin River. The Australian Democrats had called for a Senate Select Committee of Inquiry into whether a new power scheme was warranted in Tasmania, and this was supported by the Federal Parliamentary Labor Party. The Federal Government also gave complete support to the World Heritage listing of the south-west wilderness, as proposed by the Tasmanian Government.¹⁷³

The referendum, held in December 1981, gave no result and was considered by many to be a farce. A 'no-dams' option was not included, resulting in 45 per cent of the votes being informal, with 32 per cent of these having 'no-dams' written-on.¹⁷⁴ By January 1982 the State Government had reversed its earlier decision and was officially working towards implementing the Gordon below Franklin Scheme, and in the wake of upcoming elections, moved into a major publicity campaign. At the same time, the Federal Government announced the nomination of the south-west wilderness to the World Heritage List under the UNESCO Convention for the Protection of the World Cultural and Natural Heritage. This included the South-West National Park, Wild Rivers National Park and Cradle Mountain-Lake St Clair National Park.¹⁷⁵

The Holgate Government fell in the election of May 1982 and was succeeded by a Liberal Government led by Premier Robin Gray (the Holgate Government was brought down by the Liberals and Australian Democrat, Norm Sanders). The Liberals had always been strongly in support of the HEC stand. Against the tide of national thought, which was moving more and more towards preserving the Franklin, Gray attempted to promote the Gordon below Franklin Scheme nationally and tried to pressure Fraser into withdrawing the World Heritage nomination.¹⁷⁶

With Federal elections looming, the Franklin issue was one of great political significance. In July 1982 the Australian Labor Party voted to support a policy to conserve south-west Tasmania and prohibit any damming or inundation of the south-west rivers.¹⁷⁷ This gave the Federal Opposition the support of the conservationists and put pressure

on Fraser. By mid-1982 the HEC had commenced work on the Gordon below Franklin Scheme.

The conservationists, organised by Brown and the TWS, established a vigil on the Gordon River in August 1982 and embarked on a national campaign to focus attention on the plight of the Franklin River. This brought together thousands of people from inside and outside Tasmania, from a wide range of backgrounds, to participate in a non-violent protest. The vigil ran for many weeks during which there were over 1 000 arrests of conservationists and much national press coverage. It was a highly organised and efficient blockade that was specifically directed towards the Federal political arena. The conservation movement was also active in many key mainland electorates, and politicians on both sides of the Federal Parliament were lobbied to take a stand against the dams. The Federal Government had been advised in August 1982 that it possessed the constitutional power to stop the dams being built. The pressure was firmly on the Federal Government to stop the HEC and save the wilderness.¹⁷⁸

In October 1982 legislation was introduced into Federal Parliament to enforce the Federal Government's powers to stop the dam developments in south-west Tasmania. Shortly after (November 1982) the Report of the Senate Select Committee was tabled in Parliament and this recommended the preservation of the Franklin River in its natural state as a matter of national policy. With Federal Government intervention now an imminent threat, the Deputy Premier of Tasmania and the Attorney-General journeyed to Paris to attempt to persuade the World Heritage Committee not to ratify the Australian nomination of the south-west wilderness area. However, the Committee only recognises national governments and Gray's attempts were to no avail. In December 1982 the World Heritage Committee officially listed the south-west on the World Heritage List.¹⁷⁹

With the HEC still pushing ahead, despite the efforts of the Franklin blockaders, Fraser toured the area and offered Gray over \$500 million to defer further development of the Gordon and Franklin Rivers and proceed with the construction of a 200 megawatt thermal power station. The Shell Company of Australia had just announced there were

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extensive coal deposits in the Mt Nicholas area of north-east Tasmania. Gray flatly rejected the offer of Fraser.¹⁸⁰

Fraser called a Federal election on 3 February 1983 and on the same day the Opposition leader Bill Hayden resigned and was succeeded by Bob Hawke. The Labor Party won with a massive swing in all States except Tasmania. In the first formal meeting of the new Cabinet the Hawke Government took steps to halt the dam development in south-west Tasmania through the introduction of World Heritage Regulations. On 6 April 1983 writs were filed by both the Tasmanian and the Commonwealth Governments in the High Court of Australia to settle the dams issue.¹⁸¹

The World Heritage Properties Conservation Bill was passed by the Federal Parliament on 20 May 1983. This ensured that the World Heritage Area in south-west Tasmania would be preserved in its original state and required the immediate cessation of the Gordon below Franklin Power Development Scheme. On 1 July 1983 the High Court of Australia ruled by four votes to three that the Gordon below Franklin Dam could not proceed and that the Commonwealth's had absolute power to enforce and protect the World Heritage Listing.¹⁸² The dam builders were stopped and the rivers were saved.

Third phase of expansion - tall trees

Tasmania now had a World Heritage Area that covered 770 000 hectares in the west of the State, encompassing the South-West National Park, Franklin-Lower Gordon Wild Rivers National Park and Cradle Mountain-Lake St Clair National Park (Figure 4.8). However, the battle to save the wilderness was not yet over. From a wilderness and nature conservation perspective, the boundaries of the new WHA were far from satisfactory and in 1984 conservation groups launched a proposal for a much enlarged Western Tasmania National Park of 1.8 million hectares (Figure 4.9):

The proposed Western Tasmania National Park encompasses one of the last wild regions on Earth. It is a region of unique grandeur and extraordinary diversity: of mighty rivers and soaring peaks; of

jagged ranges bejewelled with glacial tarns; of gorges, caves and countless cliffs and waterfalls; of windswept plains and extensive landlocked harbours; and of majestic coastlines battered by the relentless seas of the Southern Ocean.¹⁸³

It was argued by conservation groups and the IUCN that the boundaries of the existing WHA were not designed to protect wilderness and in some areas were inadequate to the "point of absurdity".¹⁸⁴ A narrow neck, less than four kilometers wide connected the southern and northern regions of the WHA and the Gordon River was protected by only 800 metres of reserved land on either side of the river. Numerous other areas considered of high wilderness and aesthetic values were not included in the WHA, such as the Denison-Spires region. Land of high commercial value for the forestry, mining and hydroelectric industries was excluded from the reserve and there were imminent threats to many of these areas.

Of particular concern for the conservationists was the rate at which forests were being harvested in the State and the growing encroachment of forestry activities on the wilderness of the south-west. The loss of forests had effectively doubled during the 1970s after the Government granted woodchip export licences to the State's major forestry companies in the late 1960s/early 1970s. Forestry in Tasmania was monopolised by three companies which held concession rights over most of the public forested land in the State.¹⁸⁵ In the early to mid-1980s these companies were pressuring the Government into granting an early renewal of their woodchip licences to 1988 and to reduce restrictions on their activities, such as the provision of environmental impact statements (EISs) for logging in National Estate areas.

In response, conservation groups including the ACF, TWS and TCT, established a Forest Action Network to research the economics of the woodchip industry, forest management practices and national park proposals. In 1985 the conservationists began a forests campaign, taking actions that included public rallies and protests in trees outside Parliament House in Hobart, and directed pressure on the Federal Government to save the forests of Tasmania from the woodchip mills.

The forests campaign was also part of a broader national movement to conserve the rapidly diminishing forests of Australia, many of which were similarly destined for the export woodchip market.¹⁸⁶ As a result of this pressure, in 1985 the Federal Government called for the forestry companies in Tasmania to produce an EIS into the Tasmanian woodchip industry. This was submitted in September 1985, but was rejected by conservation groups who labelled it "...the most transparent piece of industry propaganda ever prepared".¹⁸⁷

The State Government called an election in February 1986 and Gray's Liberal Party was returned to power. Forestry activities immediately pushed ahead towards the boundary of the WHA. Two areas became sites of conflict between forestry workers and conservationists, where the national press captured images of committed 'greenies' lying in the path of bulldozers and hugging trees while chainsaws worked between their legs.¹⁸⁸ One of the battle grounds was at Farmhouse Creek in the contested Southern Forests, and the other was in the Lemonthyme Valley, near Cradle Mountain in the north. The Southern Forests comprised 270 000 hectares and the Lemonthyme 14 300 hectares and both lay adjacent to the eastern boundary of the WHA (Figure 4.10). These forests comprised part of the enlarged area sought by conservation groups for World Heritage listing.¹⁸⁹

In June 1986 the Federal Government renewed the woodchip licences, with the proviso that logging would not take place in National Estate areas without consultation between the State and Commonwealth Government (a Memorandum of Understanding). In the meantime, the protesters continued their vigils in the forests. In blatant defiance of the Memorandum, Gray approved logging in the Jackey's Marsh-Quamby Bluff National Estate area in the Great Western Tiers, north-east of the WHA. The decisions of the State Government and the continued pressure from the conservationists led the Federal Labor Government of Hawke to establish a review of National Estate forests in Tasmania and requested the Tasmanian Government stop logging in these areas, but Gray refused. The action taken by Hawke was also brought about by pressure from Senator Graham Richardson (the Federal Minister for the Environment), who seemed sympathetic towards the conservation lobby. Richardson had recently made a

helicopter flight over the areas under dispute, an experience which (putatively) converted him to the conservation cause.¹⁹⁰

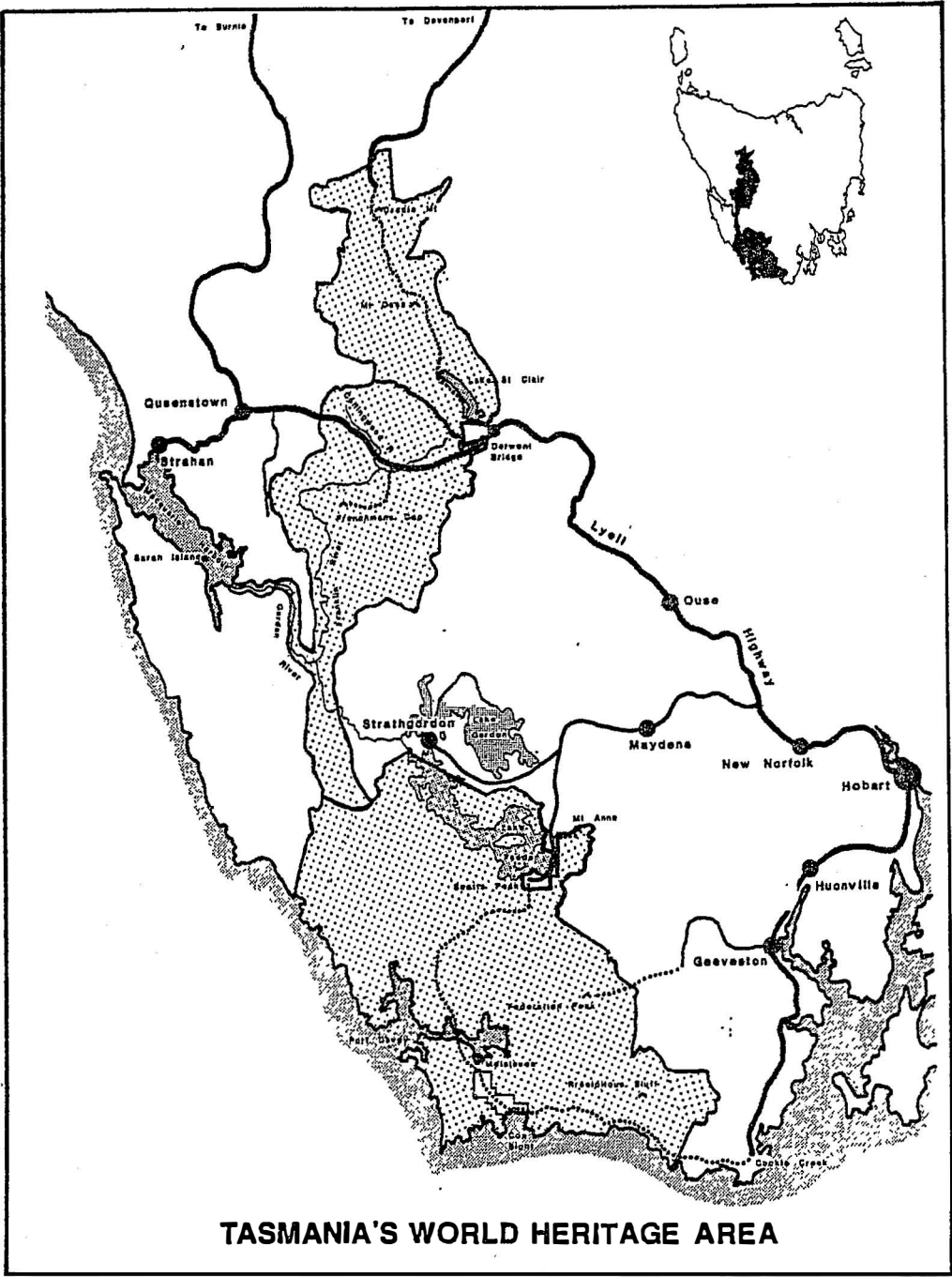


Figure 4.8: Tasmania's World Heritage Area, 1982. Source: The National Parks and Wildlife Service (undated). *An Invitation: Help Plan the Future Management of Tasmania's World Heritage Area*. National Parks and Wildlife Service, Sandy Bay, Tasmania.

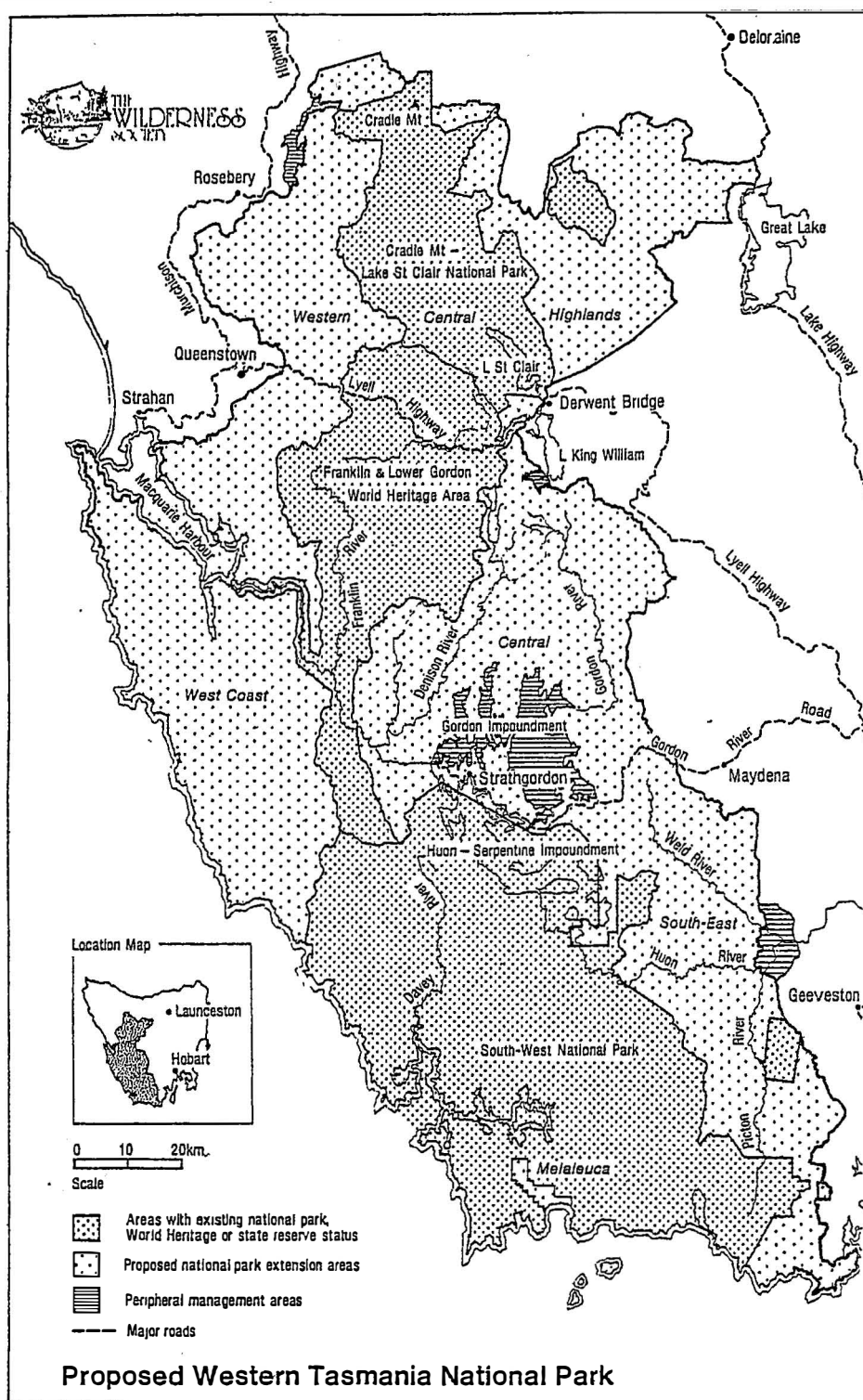


Figure 4.9: Conservation groups' proposed enlarged Western Tasmania National Park (World Heritage Area), 1984. Source: The Wilderness Society, 1984. *The Proposal for a Western Tasmania National Park*. The Wilderness Society, Melbourne.

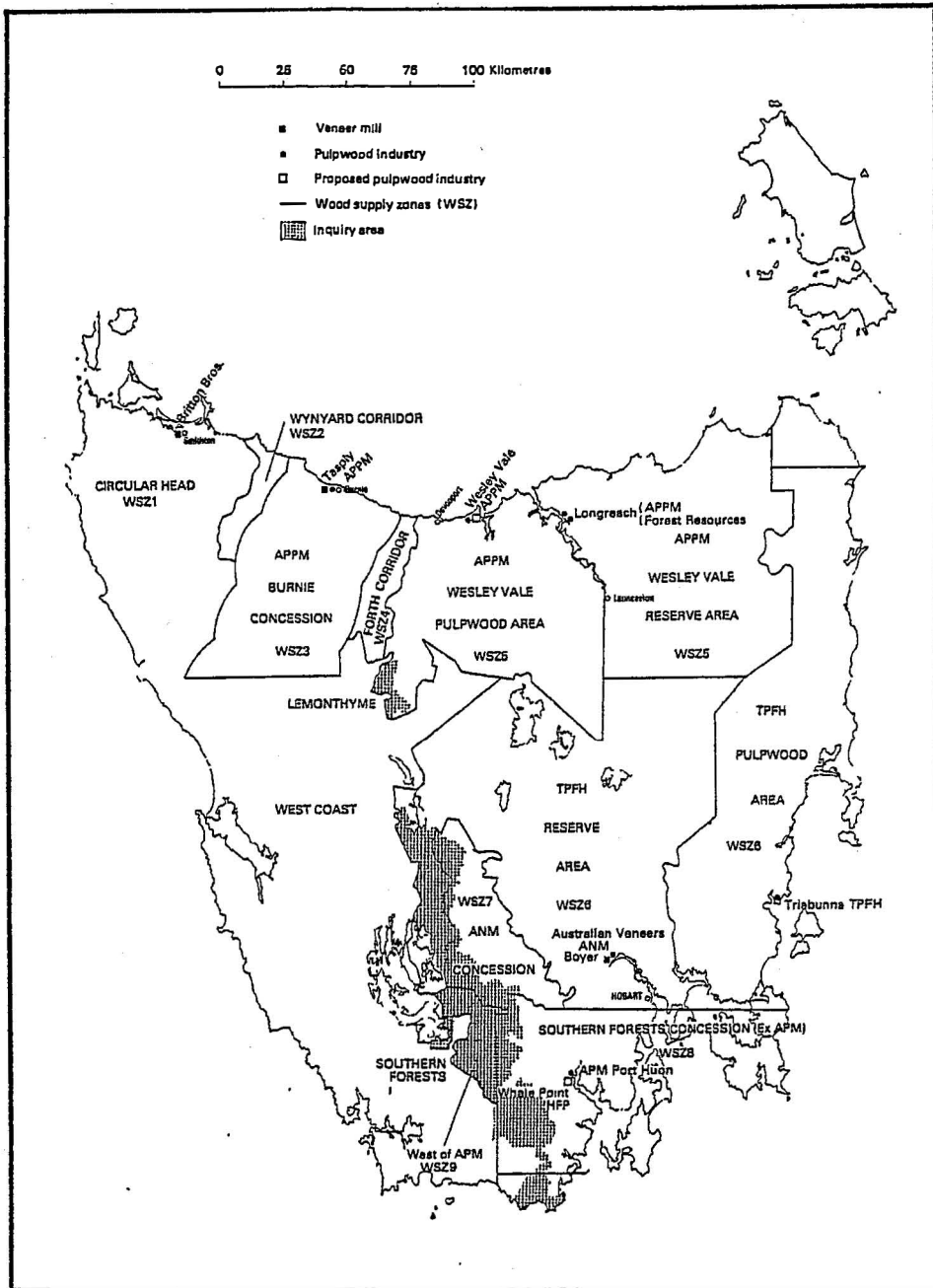


Figure 4.10: The Lemonthyme and Southern Forests inquiry areas, Helsham Inquiry 1987, shown in relation to forest concession areas in Tasmania. Source: Department of the Arts, Sport, the Environment, Tourism and Territories, 1988. *Report of the Commission of Inquiry into the Lemonthyme and Southern Forests. Volume II, Appendices and Maps.* Australian Government Publishing Service, Canberra.

A Federal election was looming and there was much pressure on the Commonwealth Government from conservationists, industry and the Tasmanian State Government. In April 1987, the Federal Parliament passed the Lemonthyme and Southern Forests (Commission of Inquiry) Act to determine whether the forest were of World Heritage status, and whether there were economic alternatives to logging these forests. During the Inquiry, which came into operation in May 1987, a moratorium on logging was imposed in the inquiry area. This was an unusual and highly political step, given that the assessment of an area for World Heritage nomination was normally undertaken by suitably qualified scientists, not through a court. It has been widely argued that this course of action was a delay tactic, specifically designed to take pressure off the Federal Government, which could thereby avoid making a decision in the pre-election period.¹⁹¹

Mr Michael Helsham Q.C. was appointed as the presiding judge over the Inquiry, with two other commissioners, Robert Wallace, an academic economist from Adelaide, and Peter Hitchcock, a forestry and park management expert. Hitchcock had been involved in the nomination of New South Wales rainforests to the World Heritage List and was an experienced policy manager with the NSW National Parks Service.

Over 300 submissions were made to the Inquiry from interested parties, and many hours of oral evidence were presented by dozens of expert witnesses. The Forestry Commission of Tasmania lodged a legal challenge in the High Court of Australia over whether the Federal Government had the power to prevent logging in an area of potential World Heritage value, but not yet listed as World Heritage, and whether the Federal Government's assessment of World Heritage values could be questioned. While the court case was proceeding the Tasmanian Government refused to participate in the Helsham Inquiry, but was forced to reconsider when the High Court found against the Forestry Commission and ruled that the Inquiry was legally valid.¹⁹²

The final report of the Helsham Inquiry was presented to Cabinet in May 1988. The majority finding was that only five areas (about 10 per

cent) of the inquiry area were worthy of World Heritage status. These comprised 29 350 hectares including Cathedral Mountain and the Southern Forests areas of Mt Bobs, Mt Anne and Exit Cave, and 5 500 hectares in the Lemonthyne Forest. The minority finding by the dissenting commissioner, Peter Hitchcock, was that the entire inquiry area, including all of the Lemonthyme and Southern Forests as well as some additional adjoining land, was of World Heritage status.¹⁹³

Nine of eleven expert scientific witnesses to the Inquiry publicly disassociated themselves from the majority finding, arguing that it was internally inconsistent and that the two commissioners responsible demonstrated a lack of understanding of the scientific and ecological principles involved. The majority decision was also flatly rejected by conservation groups. The whole exercise was considered a complete waste of time, public resources and individual effort.¹⁹⁴

Conservation groups challenged the majority finding in the Federal Court and lobbied Cabinet to accept the minority finding. The Federal Government was advised that the minority finding could legally stand on its own and that the majority report had erred in its interpretation of the legislation. There was much public support for the protection of the forests and wilderness, as witnessed by a public demonstration of 5 000 people in Hobart during the 1988 Labor Party annual conference.¹⁹⁵ The Federal Government was well aware of the strength of the green vote. The July 1987 Federal election had seen the Hawke Labor Government returned to office for the third time, but only by a very narrow margin and green votes had been crucial to this outcome.¹⁹⁶

The fate of the forests was in the hands of the Federal Cabinet. Discussions spread across a number of Cabinet meetings, but Cabinet could not decide whether to accept or reject the majority Helsham finding. Senator Richardson called a major scientific witness to the Helsham Inquiry, Dr Jamie Kirkpatrick (an ecological expert from the University of Tasmania), and Hitchcock, the dissenting commissioner, to Canberra to devise an alternative proposal.¹⁹⁷ They were given the difficult task of producing a boundary in the disputed area that included only a given percentage of sustained yield sawlog production forests. The sustained yields of individual areas were based on figures produced

by the Forestry Commission. The boundary drawn by Kirkpatrick and Hitchcock was largely motivated by nature conservation concerns. Much of the forests debate during the Helsham Inquiry had centred around tall trees and *Eucalyptus regnans* (mountain ash) forests were the most poorly reserved of these communities in the State. Given the restrictions under which it was to be formulated, the boundary thus aimed to capture the maximum possible area of *E. regnans* forests.¹⁹⁸

In an ingenious move, Kirkpatrick and Hitchcock drew a boundary that encircled areas of high value commercial tall forests, leaving them in isolated pockets surrounded by reserved land. The forest industries were highly unlikely to be able to access these forests as they were far removed from existing roading and land of national park status would have to be traversed. Kirkpatrick has commented that from a nature conservation or wilderness perspective, the boundary was a ridiculous one, with many holes and salients, but it did meet their aims of capturing the maximum possible area of *E. regnans* tall forest and fulfilled the quotas imposed by Richardson.¹⁹⁹

Prior to Cabinet discussions, conservationists lobbied Hawke, Richardson and Kerrin (the Primary Industry Minister) to reserve the suggested area. The Richardson pro-conservation plan was up against a pro-development extension, including little commercially viable forest, which was backed by the Tasmanian Government and the timber industry. After much debate, there was a narrow minority favouring the Richardson option. The boundary drawn by Kirkpatrick and Hitchcock became the preferred option. As this was produced in an attempt to capture commercial forests, it excluded a number of areas of conservation significance. The Cabinet meeting decided to include those areas in the proposed extension favoured by the Minister for Primary Industry (Kerrin) that were not within the Richardson boundary, as part of the WHA extensions, thereby producing a better boundary.²⁰⁰ The conservation lobby had made a substantial victory.

Around 80 per cent of the Inquiry area (262 000 hectares) was now protected and earmarked for World Heritage nomination. There were still some important areas considered of high wilderness values that conservation groups were keen to see in the expanded WHA. The ACF,

Wilderness Society and TCT produced a draft nomination for the Western Tasmania WHA that included the Lemonthyme and Southern Forests, the Denison-Spires Region and the Central Plateau (Figure 4.11).²⁰¹ The Denison-Spires area comprised 116 000 hectares between the protected Southern Forests area and the central-eastern boundary of the existing WHA, and was referred to as the "Hole in the Doughnut".

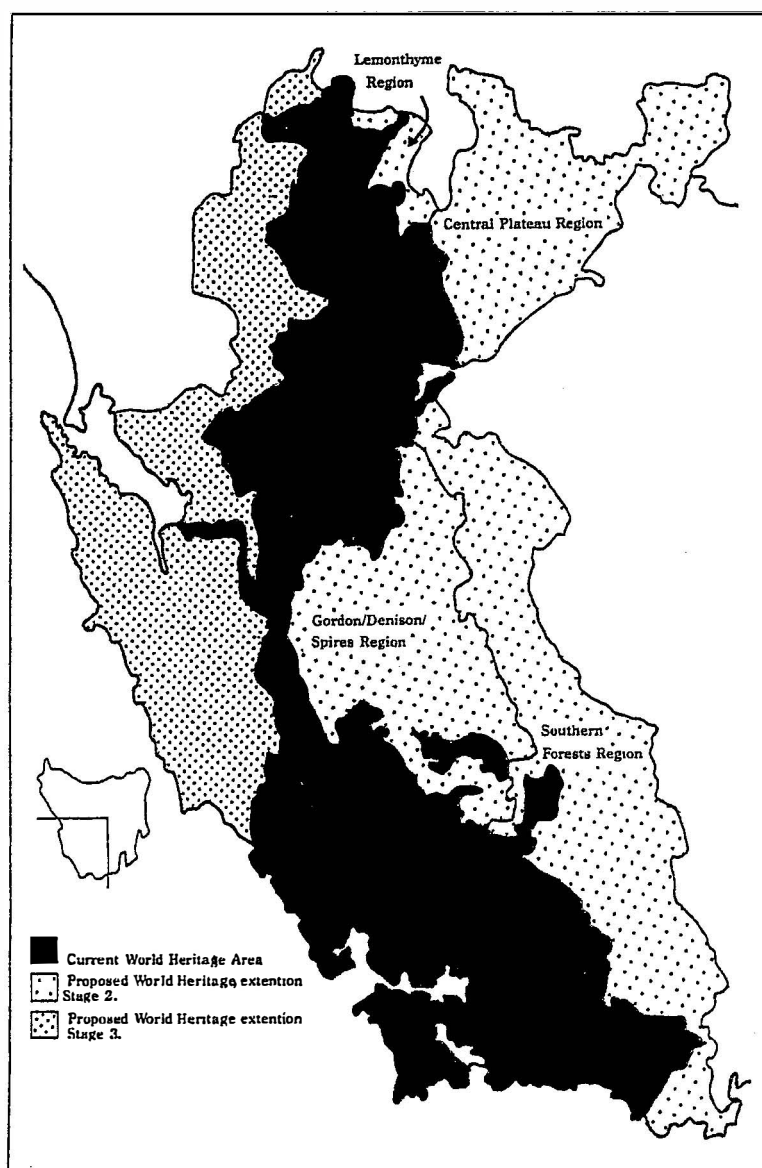


Figure 4.11: Conservation groups' draft nomination for the Western Tasmania World Heritage Area, 1988 (areas labelled Stage 2 and Stage 3 were both sought for World Heritage listing). Source: The Australian Conservation Foundation, the Wilderness Society and the Tasmanian Conservation Trust, 1988. *Western Tasmania Stage 2 World Heritage. A draft nomination.*

In the Tasmanian State elections of May 1989, five Green Independents were elected to Parliament. The rejection of the major parties was largely a result of public concerns regarding environmental issues in Tasmania. This included the proposed construction of yet another pulp mill at Wesley Vale in north-west Tasmania, which would consume 5 500 hectares of forest per year in a chlorine bleaching process and result in toxic dioxin effluents. The Green Independents negotiated with the Labor Party (Gray's Liberal Party refused to negotiate) and on 29 May 1989 an historic Labor-Green Accord was signed.²⁰²

Part of the deal struck between the Greens and the Labor Party was for the expansion of the WHA to include areas sought by conservation groups. After extensive negotiations, the final boundary of the World Heritage nomination was announced by the Federal Government in September 1989.²⁰³ The extensions encompassed an area of around 600 000 hectares and included the protected areas of the Lemonthyme and Southern Forests, the Denison-Spires region, the Central Plateau Protected Area, and Hartz Mountains National Park.

Minor additions were made to the western boundary of the WHA, to include part of the threatened orange bellied parrot habitat south of Macquarie Harbour. However, the boundary in most of this area remained controlled by a southerly extension of the mineral-bearing Mt Reid Volcanics. This was successfully excluded by the mining lobby which had strong State and Federal Government support.²⁰⁴

The nominated Western Tasmania Wilderness World Heritage Area covered an area of 1.38 million hectares (20 per cent of the land area of Tasmania), and was twenty times greater than the area recommended in the majority Helsham report. The new boundaries (Figure 4.12) were ratified by the World Heritage Convention in 1989.

Walls of Jerusalem

While the Lake Pedder/south-west question was being debated during the 1970s, there were also moves to establish a national park in the north-west area of the Central Plateau, around the Walls of Jerusalem.

The Central Plateau comprises a large geographic region in central Tasmania covering over 5 000 square kilometers of largely alpine and subalpine territory, dotted with over 4 000 lakes. The Walls of Jerusalem area lies in the highest altitude zone of the Central Plateau and is a highly scenic landscape with sensitive alpine environments.



Figure 4.12: The Tasmanian Wilderness World Heritage Area, 1990.
Source: Parks and Wildlife Service, Tasmania, 1999. *Tasmanian Wilderness World Heritage Area Management Plan 1999*. Parks and Wildlife Service, Tasmania.

The first moves to establish a reserve at the Walls of Jerusalem were made in 1946 when Jack Thwaites, a member of the SPB, suggested that the area become a scenic reserve through inclusion in the adjacent Cradle Mountain-Lake St Clair National Park.²⁰⁵ The SPB felt that as the area was isolated it would be difficult to control and there would be objections to its reservation from local fur trappers. It was also thought that the HEC, which had extensive interests in the water resources of the Central Plateau, may wish to extend its operations in the area. The Board resolved that it would not take steps to have the area reserved at that time.²⁰⁶

The SPB reconsidered the idea in the early 1950s and raised a proposal for a Central Tablelands Scenic Reserve that would incorporate the Walls of Jerusalem, Chudleigh Lakes and Devils Gullet, but the matter was never finalised.²⁰⁷ In 1962 the Launceston Walking Club requested the SPB declare a national park at the Walls of Jerusalem and the Board referred the proposal to the HEC and Forestry Commission for comments.²⁰⁸ Further urges to reserve the area were made to the SPB by the Federation of Field Naturalists Clubs and North-West Walking Club in 1963 and 1965, both of which supported the earlier proposal made by the Launceston Walking Club.²⁰⁹

In 1960 and 1961 extensive fires swept over the Central Plateau causing considerable damage to delicate high altitude plant communities and contributing to accelerated soil erosion. A Tasmanian Government Standing Committee on the Conservation of Natural Resources of Tasmania contracted a specialist from the Soil Conservation Authority of Victoria to assess the state of landscape damage on the Plateau. The report, produced in 1962, outlined extensive soil erosion problems and widespread degradation of vegetation, and recommended control and restoration of the region.²¹⁰

The SPB delayed its consideration of the Walls of Jerusalem National Park proposals until the Natural Resources Conservation Committee decided on the management of the region. It was thought that the higher altitude areas of the Plateau may be declared a reserve to protect high level watersheds and be brought under the control of the HEC. There was some debate among SPB members as to whether this would

adequately protect the area and that it may be better served by proclamation as a national park. However, the Board decided to advise the Clubs that the Government had alternative proposals for the area, which may meet their aims, and until these were dealt with they were not in a position to consider reservation of the area.²¹¹

The recommendations to impose stricter controls on land use and engage in restoration of degraded areas were not heeded by the Government and in the late 1960s/early 1970s, there was increasing concern about the Central Plateau region. In 1969 the ACF drew attention to the lack of management of high country areas throughout south-east Australia. This included the Central Plateau region, which comprises 78 per cent of Tasmania's high mountain environments and 43 per cent of the alpine and subalpine areas of Australia.²¹² Within Tasmania there was growing interest among conservation groups and scientists in protecting the Central Plateau. The TCT held a one day symposium in 1970 to stimulate public awareness of resource management issues on the Plateau, and the Botany Department of the University of Tasmania submitted a document for resource management in the region to Premier Bethune.²¹³

The Royal Society of Tasmania held a weekend symposium and tour in the Central Plateau region in 1972. This was the first of its kind and resulted in a publication, *The Lake Country of Tasmania*, which highlighted the pressing need for planned management of the area.²¹⁴ There were many competing interests in the Central Plateau and these were coming under closer scrutiny. One of the longest standing traditional uses was summer grazing of sheep. Grazing in the highland pastures dated from the 1830s, and by the 1880s most of the freehold and leasehold grazing rights had been established. Numbers of sheep increased during the nineteenth century, and by the 1950s, there were some 160 000 dry sheep equivalents grazing the Plateau between December and May. Burning of highland runs to encourage the growth of fresh pasture also became a regular practice.²¹⁵

Early in the nineteenth century rabbits and hares spread across the Plateau, multiplying rapidly. The combination of overstocking, burning and very high rabbit populations led to loss of vegetation and

extensive soil erosion problems.²¹⁶ Another major user of the Plateau was the HEC, which began to harness water resources in 1910, with the construction of the Waddamana Power Station. The Plateau contains thousands of lakes and lies in the catchment area of a number of river systems including the Fisher, Lake, Nive, Dee, Ouse Shannon and Derwent Rivers. With water such an abundant resource, the HEC undertook extensive water storage and power generating developments on the Plateau.²¹⁷

The many lakes and streams provided recreational opportunities and the introduction of brown trout and rainbow trout early in the century made the Plateau a popular destination for anglers. Other recreational activities included trekking by foot or horse and four wheel driving. The lower altitude areas of the Plateau also had a long history of timber harvesting.²¹⁸ The major concerns about the Central Plateau centred around the extent of environmental damage and the lack of coordinated planning and management of the region. There were eleven State agencies and seven municipal councils involved in the Central Plateau.²¹⁹

Various pressure groups with conflicting interests became embroiled in the debate about the future of the Plateau. Bushwalkers and conservationists regarded grazing as destructive and were pressing for tighter controls, particularly in the more delicate higher altitude environments. Many pastoralists, on the other hand, felt the land would deteriorate if regular grazing and burning were prohibited.²²⁰ As a means of resolving some of the conflict between conservationists and graziers, in 1973 the Tasmanian Farmers and Stockowners Association suggested establishing three land use zones. They proposed the upper western region around the Walls of Jerusalem be proclaimed a national park and all grazing licences be cancelled in this zone; that grazing and recreational activities be permitted in the central area of the Plateau; and that the eastern zone be dedicated to grazing alone. However, this was strongly resisted by angling clubs who wanted the western area to be set aside as an angling reserve, rather than a national park.²²¹

The idea of land use zoning had been raised during the Royal Society symposium on the Central Plateau, and was also a management

strategy being employed in Kosciusko National Park, which encompassed a large and complex high mountain region in mainland south-east Australia.²²² In 1975, two botanists and a political scientist from the University of Tasmania urged the Lands Department to implement a zoning scheme for the Plateau. They suggested the upper north-west (Walls of Jerusalem) area be accorded maximum protection through declaration as a national park; the area above 900 metres in altitude in the northern part of the plateau be managed to exclude grazing and optimising low impact recreational pursuits; and the area below 900 metres be a multipurpose use area, with grazing, forestry, hydroelectric and recreational activities.²²³

As a result of pressure from different interest groups the Lands Department produced a proposed management plan for the Central Plateau area in 1976.²²⁴ This identified two zones in the region where management issues were considered. Zone 1 encompassed the high altitude western portion of the Plateau, and Zone 2 much of the elevated area along the north. These zones covered just over one half of the Plateau. The remaining area comprised private land and land under the control of the HEC, and was not subject to the management scheme. The plan recommended that Zone 1 be placed under the control of the NPWS, as a Conservation Area, and that Zone 2 be managed for multipurpose use.

Numerous interest groups and individuals made submissions to the Lands Department regarding the management plan. These included bushwalking clubs, conservation groups, farming organisations, naturalist clubs, angling organisations, forest industries, horse clubs, off-road vehicle and motor-cycle clubs, progress associations and shooting organisations. Conservation oriented groups had been pressing for a single authority to be responsible for managing the area and for the Walls of Jerusalem to be given national park status to protect its fragile alpine environments. The proposed management plan did not meet their expectations. However, despite a considerable amount of pressure, the recommendations suggested in the draft were not changed in the final management plan produced in 1978.²²⁵

The Walls of Jerusalem area was placed under the control of the NPWS, but its new status as a Conservation Area did not offer the level of protection sought by conservationists. The HEC and Inland Fisheries Commission were permitted to exercise their statutory powers over the area, and some activities which were widely regarded as particularly damaging in alpine areas, such as horse riding, were permitted.

Pressure to protect this fragile and highly scenic landscape continued and in 1981 the NPWS was successful in establishing a portion of the Conservation Area (11 510 hectares) as the Walls of Jerusalem National Park (the NPWS had previous plan to incorporate the area in the Cradle Mountain-Lake St Clair National Park).²²⁶ This was no doubt partly attributable to the efforts of the highly conservation minded Director of the NPWS, Murrell. A further part of the Conservation Area to the south of the existing Walls of Jerusalem National Park was converted to National Park status as part of the WHA boundary extensions in 1989 (refer to Figure 4.12).

Douglas-Apsley

Out of the wilderness conservation drive of the late 1970s there also emerged a proposal for a national park encompassing the Douglas and Apsley Rivers in Tasmania's central east coast region. A wilderness inventory produced in 1979 by the Centre for Environmental Studies, University of Tasmania, identified the Douglas-Apsley area as the only remaining large tract (over 10 000 hectares in area) of dry sclerophyll forest in the State. The study stressed that this area offered one of the last chances for this ecosystem type to be preserved intact in Tasmania.²²⁷

There were imminent threats to the integrity of the Douglas-Apsley area from the forestry and mining industries. The entire area was part of the TPFH forest concession granted under the Pulpwood Products Industry (Eastern and Central Tasmania) Act in 1968. While not planned for clearfelling in the short-term, TPFH was likely to begin operations over the next five-ten years.²²⁸ The Shell Company of Australia in a joint venture with Industrial Mining and Investigations

Pty Ltd was also assessing coal deposits in the Douglas-Apsley area in 1978 and held an exploration licence over the area from January 1979.²²⁹

A considerable amount of exploration had taken place in the area during the nineteenth century after coal was discovered close to the Douglas River in 1843. Some deposits were worked by the Dalmaine Collieries Company between 1914 and 1918 and 1939-1953, while others were worked by the Mt John Coal Company during the 1920s. Exploration during the late 1970s indicated that a large part of the Douglas-Apsley area was underlain by coal seams, amounting to approximately 36 per cent of the State's known coal reserves. While unsuitable as coking-coal or for the export steaming coal market, the deposits were considered viable for power generation. The Shell Company and Industrial Mining and Investigations were granted three joint retention licences over the area and these extended to 1993.²³⁰

In 1980 a study of endemic plant species in the central east coast area identified a number of species unique to the Douglas-Apsley and six small reserves were proposed for protection of these and other rare and threatened species.²³¹ A preliminary proposal for a Douglas-Apsley National Park was made by the TWS in 1981. While limited data were available on the area, the main argument raised in this proposal was that the Douglas-Apsley area contained the largest stretch of intact dry sclerophyll forest on the Tasmanian mainland, with outstanding diversity of species and dry eucalypt forests. Twelve species of eucalypts were known from the area, five of which were endemic and two unreserved in the State. The area was said to have particularly interesting flora and that its reservation would be invaluable for practical and scientific purposes, as a biological reference area and as a seed bank. No comprehensive fauna studies had been undertaken, but an endangered freshwater fish, the Australian grayling (*Prototroctes maraena*), was known to occur in the Douglas and Apsley Rivers. The area proposed for reservation was largely State Forest and the TWS wished to include a private block (Thompsons Block) in the reserve, which had been bequeathed to the Society.²³²

The national park proposal sparked growing interest in the Douglas-Apsley area and further biological investigations were undertaken. The

NPWS and the Forestry Commission began a study of dry sclerophyll vegetation in the State and the Forestry Commission declared a moratorium on logging in the Douglas-Apsley area until the results were considered. This was largely achieved through the efforts of some conservation-minded bureaucrats. The study revealed a rich diversity of dry sclerophyll plant species and communities, many of which were identified as being of high conservation priority.²³³

With further evidence available a group of conservation organisations, including the Wilderness Society, TCT, ACF and the Forest Action Network presented a detailed proposal to the government for the Douglas-Apsley National Park in 1984. There was growing public concern about the large scale clearing of dry sclerophyll forest in the State, particularly that driven by the export woodchip industry. The proposal stated:

The dry east coast forests of Tasmania are floristically diverse and, especially in the central east coast, contain many rare and endangered plants. These forests are rapidly being lost or altered, and are not adequately protected in existing National Parks...This region is of great significance for flora conservation and should therefore be preserved and managed accordingly. It is also one of the most beautiful natural environments remaining on the east coast.²³⁴

The values and benefits of the proposed reserve were argued to centre around its high biological diversity of plant species and communities, which included at least 30 endemic, seven rare and one endangered species. This biodiversity was of great scientific and benchmark values and also provided important habitat for birds and a variety of fauna. The potential economic value from tourism was given considerable discussion in the proposal. The area was considered to be of high aesthetic and recreational values, and its proclamation as a national park may enhance the area's attractiveness to tourists. This it was argued would accrue more long term financial and employment benefits to the nearby town of Bicheno and the surrounding region, than the woodchipping and coal mining industries.

The area proposed for reservation was approximately 14 000 hectares and the boundary was selected in view of protecting the catchments of the Douglas, Apsley and Denison Rivers and to protect viable areas of biological diversity and cultural values. It also encompassed various smaller reserves proposed in the endemic species study of 1980. In 1984 conservation groups nominated most of the proposed reserve for the Register of the National Estate.²³⁵

The Government rejected the national park proposal. Gray's Liberal Government had clearly demonstrated its industry allegiance during the south-west wilderness debate, and with mining and forestry resistance to the proposal, was unlikely to support the conservationists. The campaign continued and conservation groups produced material to publicise the values of the area and gain support for the reserve proposal. It was said that if left unreserved most of the wood from the park would be chipped by TPFH, a company wholly owned by APPM, which controls about one million hectares (50 per cent) of Tasmania's public forests. The proposed reserve encompassed only 1.5 per cent of the forest available to APPM, less than half of which was commercially loggable. It was also argued that the woodchip supply commitments were made a decade ago on the basis of inadequate resource assessment and management and almost all forests in eastern Tasmania would need to be clearfelled for woodchips to meet these commitments.²³⁶

Conservationists continued to lobby politicians for the creation of a Douglas-Apsley National Park, but the Government did not change its policy. The Gray Government did delay logging in the area and the Labor Party claimed to make the proclamation of the national park part of its policy in 1987.²³⁷ However, it was not until the historic Labor-Green Accord of 1989 that the fortunes changed for the reserve proponents. Part of the agreement signed between the Green Independents and the Labor Party was for the Douglas-Apsley area to be reserved as a national park. This was achieved in December 1989 when an area of 16 080 hectares was proclaimed as the Douglas-Apsley National Park (Figure 4.14).²³⁸

The forestry and mining industries were angered by the deal and publicly denounced the proclamation of the reserve. APPM sought

compensation for roading and associated construction works it had already undertaken in the reserve and the Tasmanian Chamber of Mines claimed that Tasmania would have to use some of the 200 million tonnes of coal now under the national park.²³⁹ Under the Labor-Green Accord mining and mineral exploration was banned from national parks and equivalent reserves. However, the Shell Company and Industrial Mining Investigations still held joint retention licences in the Douglas Apsley area until 1993 and successfully lobbied Premier Field to allow these to continue. Mining was not permitted in the reserve, but this could be circumvented by going underground. This is the only national park in Tasmania in which provisions were made to permit mining.

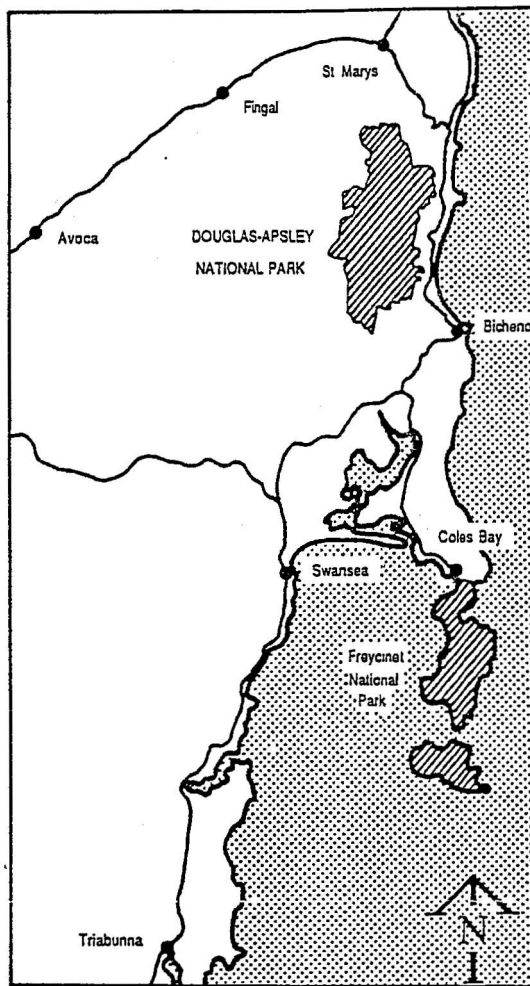


Figure 4.13: Douglas-Apsley National Park. Source: Department of Parks, Wildlife and Heritage, 1992. *Douglas-Apsley National Park Draft Management Plan, 1992.* Department of Parks, Wildlife and Heritage, Tasmania.

Discussion

There was an enormous expansion of the reserve system during the period 1971-1992, including the creation of six new national parks and a large World Heritage Area (the WHA incorporated five national parks, two of which were established during the late period). By 1992 nearly 1.6 million hectares was captured in the reserve system (23 per cent of the area of Tasmania), of which 96 per cent was in large reserves, including national parks and the WHA, and 4 per cent in small reserves - State Reserves, Nature Reserves and Aboriginal Sites (Table 4.1; Figure 4.14). Although small reserves comprised a very low proportion of the total reserved area, there was a 92 per cent increase in numbers of small reserves from the end of the middle period (1970). The most substantial expansion to the reserve system was attributable to large reserves, which covered 1.53 million hectares of the State, an increase of 283 per cent from 1970.

Table 4.1: National Parks and equivalent natural area reserves in Tasmania, 1992. Source: The Department of Environment and Land Management (DELM), 1993. *Annual Report, 1992-1993*. DELM, Tasmania.

Name	Location	Area (hectares)
<i>National Parks:</i>		
Asbestos Range	North Coast	4 349
Ben Lomond	North-East	16 527
Cradle Mountain-Lake St Clair*	West Central	161 108
Douglas-Apsley	East Coast	16 080
Franklin-Gordon Wild Rivers*	South-West	440 961
Freycinet	East Coast	11 930
Hartz Mountains*	South	7 140
Maria Island	East Coast	11 550
Mount Field	South Central	16 265
Mount William	North-East	13 899
Rocky Cape	North-West	3 064
Southwest*	South-West	608 298
Strzelecki	Flinders Island	4 215
Walls of Jerusalem*	West Central	51 800
	Sub-total:	1 367 186
*National Parks incorporated in the Tasmanian World Heritage Area		
<i>Tasmanian Wilderness World Heritage Area:</i>	Western Tasmania	1 380 000

Table 4.1 cont.

Name	Location	Area (hectares)
<i>State Reserves:</i>		
Alum Cliffs	Mole Creek	1 540
Baldock Cave	Mole Creek	43
Bradys Lookout	West Tamar	1
Brown Mountain-Remarkable Cave	Tasman Peninsula	61
Cape Bernier	East Coast	377
Cape Pillar	Tasman Peninsula	3 200
Cape Raoul	Tasman Peninsula	2 089
Coesus Cave	Mole Creek	47
Derwent Cliffs	New Norfolk	5
Devils Gullet*	Nth Central Plateau	806
Eaglehawk Bay	Tasman Peninsula	16.5
Eugena	North-West	0.87
Fairy Glade	North Central	39
Ferndene	North	35
Fluted Cape	Bruny Island	530
Forth Falls	North Central	55
Gunns Plains Cave	North-West	10
Hastings Caves	South	119
Hellyer Gorge	North-West	569
Henty Glacial Moraine	West	0.82
Holwell Gorge	Central North	123.7
Ida Bay	South	425
June Cave	Central South	20.23
Kentford Forest	King Island	37
King Solomon Cave	Mole Creek	165
Kubla Khan Cave	Mole Creek	160
Labillardiere	Bruny Island	2 332
Liffey Falls (*part)	North Central	108
Lookout Rock	Bicheno	2
Marakoopa Cave*	Mole Creek	790
Marriotts Falls	South Central	121
Mount Arthur	Tasman Peninsula	4
Mount Barrow	North-East	459
Mount Barrow Falls	North-East	81
Mount Montgomery	North-West	299
Notley Gorge	North	11
Palmers Hill Lookout	Tasman Peninsula	1
Pieman River	West Coast	3 314
Point Puer-Crescent Bay	Tasman Peninsula	53
Roger River	North-West	174
Seal Rocks	South-West King Is	529.4
St Columba Falls	North-East	314
St Marys Pass	North-East	273
St Patricks Head	North-East	150
Steppes	Central Plateau	47.92
Stewarts Bay	Tasman Peninsula	77.94
Tasman Arch	Tasman Peninsula	138
Tesselated Pavement	Forestier Peninsula	4
The Nut	Stanley	59.28
Thermal Springs	Kimberley	1
Trowutta Caves	North-West	66
Waterfall Creek	Bruny Island	24
	Sub-total:	19 909

Table 4.1 cont.

Name	Location	Area (hectares)
*State Reserves incorporated in the Tasmanian World Heritage Area		
<i>Nature Reserves:</i>		
Albatross Island	West Bass Strait	33
Bass Pyramid	Bass Strait	0.01
Betsey Island	off South-East	181
Big Green Island	Furneaux Group	270
Black Pyramid Rock	West Bass Strait	40
Chappell Islands	Furneaux Group	1 350
Christmas Island	King Island	105
Coal River Gorge	South	209
Curtis Island	Bass Strait	149
Devils Tower	Bass Strait	50
Diamond Island	off East Coast	5
Dismal Swamp	North-West	100
East Kangaroo Island	Furneaux	200
East Risdon	East Derwent	88
Foster Islands	Banks Strait	48
George Rocks	off North-East	5
Governor Island	off Bicheno	60
Green Island	D'Entrecasteaux Ch.	5
Green Point	Bridgewater	22
Hippolyte Rocks	Tasman Peninsula	4.6
Hospital Creek	Kellevie	22
Isle des Phoques	off East Coast	7.4
Isabella Island	Furneaux Group	24.6
Judgement Rocks	East Bass Strait	0.01
Lavinia	King Island	6 800
Lime Bay	Tasman Peninsula	1 310
Low Islets	Furneaux Group	8
Macquarie Island	Sub-Antarctic	12 785
Moriarty Rocks	East Bass Strait	2.54
Native Point	East Tamar	127.4
Nine Pin Point	D'Entrecasteaux Ch.	59
North-east Islet	Bass Strait	0.01
Penguin Islet	West Bass Strait	4
Reid Rocks	West Bass Strait	0.01
Rodondo Island	Bass Strait	80
Tenth Island	Bass Strait	1.242
The Doughboys	off Cape Grim	20
Three Hummock Island	Hunter Group	7 284
Three Sisters Goat Island	off North Coast	37
Tinderbox	D'Entrecasteaux Ch.	53
Township Lagoon	Tunbridge	16
West Moncoeur Island	Bass Strait	10
Wingaroo	Flinders Island	9 144
Wright Rock	Bass Strait	9
	Sub-total:	40 729
<i>Aboriginal Sites:</i>		
Mount Cameron West	West Coast	530
Sundown Point	West Coast	132

Table 4.1 cont.

Name	Location	Area (hectares)
Trial Harbour	West Coast	0.83
West Point	West Coast	580
	Sub-total	1 243
TOTAL:		1 593 724*

* Total includes other areas incorporated in the Tasmanian Wilderness World Heritage Area, including the Adamsfield, Central Plateau and Marble Hill Conservation Areas.

Nature conservation appears to have been a dominant motive behind the creation of a number of national parks during this period. This was partly driven by a recognition that some types of natural areas and some geographic regions were poorly represented in the reserve system. While Maria Island and Mt William National Parks were specifically driven by fauna conservation motives, these were strongly linked with the need to protect suitable habitat types for fauna. In the arguments presented by the reserve proponents, attention was drawn to the great loss of lowland dry sclerophyll vegetation in the State and the pressing need for its reservation, particularly as the rate of land development was rapidly increasing and opportunities for creating reserves were diminishing. Similar nature conservation motives were highly significant in the Asbestos Range and Douglas Apsley National Park proposals, which were directed towards the reservation of coastal and dry sclerophyll forest communities and species.

While the nature conservation motive was the driving force behind many of the national park proposals, economic arguments also came to the fore in the debates surrounding the reservation of these areas. National parks were argued to be of great value for tourism and recreation, offering alternative opportunities for gaining financial and employment benefits to the destructive activities which threatened the natural values of these areas. These included forestry, mining, agriculture and private land development for holiday 'shacks' and tourist resorts. It was these imminent threats that sparked many of the national park proposals and activated the proponents into investigating the values of the areas under question.

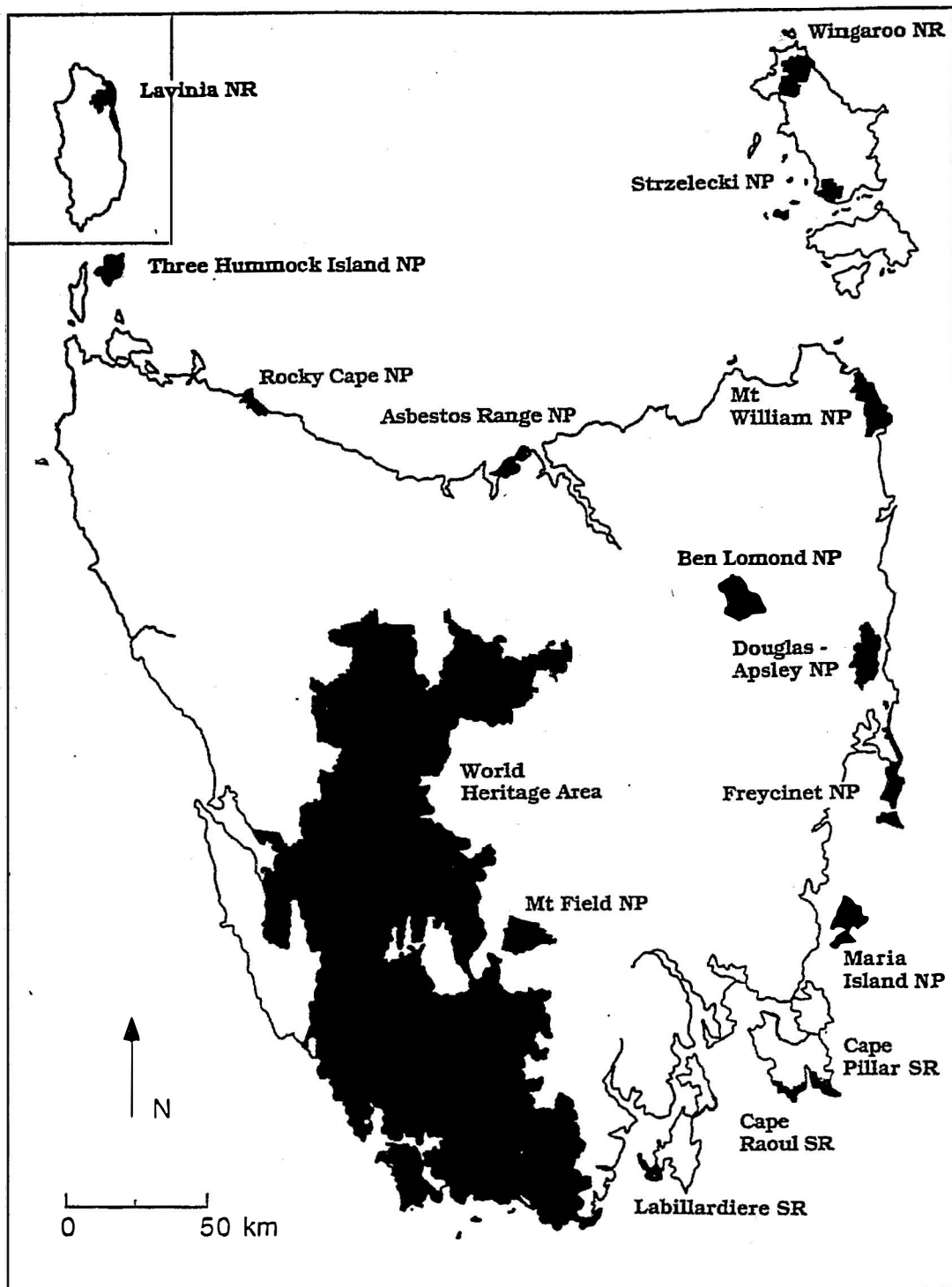


Figure 4.14: National Parks and equivalent large reserves in Tasmania, 1992. NP - National Park; SR - State Reserve; NR - Nature Reserve. World Heritage Area includes Cradle Mountain - Lake St Clair National Park, Walls of Jerusalem National Park, Franklin-Lower Gordon Wild Rivers National Park, Southwest National Park and Hartz Mountains National Park.

While addressing biases in the system of reserves established in earlier time periods, the proposals made for new reserves were largely opportunistic and unsystematic. Some of the specific nature conservation motives also led to the creation of national parks in areas that included land significantly altered by human activities, such as Maria Island and Mt William. It was not until the mid-late 1970s that systematic studies of the State's vegetation types and plant communities began to be undertaken. Douglas-Apsley was the first national park in which data based on ecological studies of the extent and conservation status of dry sclerophyll forest communities in the State were used to promote its reservation. The *ad hoc* approach to reserve selection was also the case for numerous of the smaller reserves established during this period. The NPWS had a section devoted to the expansion of the reserve system, and for a large part of this period, a highly enthusiastic Director (Murrell), whose attitude was to take any opportunity possible to create new reserves. Many islands were added to the reserve system during this period (Table 4.1) as Murrell considered these particularly suitable areas for nature conservation, and had a personal penchant for aesthetically pleasing picnic spots.²⁴⁰

The conservation of wilderness was also a major theme during this period and a strong motive behind moves to expand the reserve system. This was particularly the case in the debates surrounding the future of south-west Tasmania. The wilderness conservation motive emerged as the dominant force behind proposals to expand the South-West National Park during the 1970s and was the focus of moves to create a large World Heritage Area in western Tasmania. Other ancillary themes were also significant in these proposals, including scenery, wild rivers, tall forests, tourism, recreation and general or specific nature conservation. The creation of the Franklin-Lower Gordon Wild Rivers National Park and the WHA centred on the protection of wild rivers, but this was clearly couched within the broader wilderness frame. The tall forests debate, which led to the expansion of the WHA was similarly part of the wilderness conservation theme, with tall forests being one highly aesthetic and inspirational expression of wilderness.

Economic arguments of tourism and recreation were also raised in these debates, but in this case the proposals were more overtly centred on creating reserves for natural area conservation in its own right, rather than under the guise of other values. Other commentaries on various aspects of the south-west issue have also identified wilderness conservation as a dominant motive behind the actions of the conservationists.²⁴¹ As with many of the reserve proposals made during this period, those surrounding the south-west were largely stimulated by direct threats to natural values. These came particularly from the big developers engaged in large scale resource exploitation in the State - the HEC, and the forestry and mining industries.

Those involved in promoting national parks included a variety of conservation-oriented groups, individuals, the public, and government agencies. During the Lake Pedder and south-west issues a number of new conservation organisations emerged that were specifically devoted to creating and expanding reserves in the State. Some of these groups were the result of the efforts of highly motivated individuals who brought together people with similar interests and concerns and drew public attention to the conservation cause. Other conservation groups became more publicly and politically active during this period. Those organisations that played a significant role in raising reserve proposals and generating public interest included: the Lake Pedder Action Committee; Tasmanian Wilderness Society; Tasmanian Conservation Trust; Australian Conservation Foundation; Forest Action Network; and a swathe of conservation-minded clubs and societies whose interests were based in natural areas.

The most significant change from earlier periods was the massive growth in public support for and participation in conservation issues, and the increased level of organisation and political clout of the conservationists. This has also been suggested in other studies on the emergence of the environment movement.²⁴² The conservation issues spread beyond Tasmania to gain national and international support and were of great significance in both State and Federal politics. The protagonists employed many tactics to achieve their aims, including public protests and raising candidates for election on the conservation ticket. Australia's first Green Party emerged out of the Lake Pedder

crisis in the 1970s (the United Tasmania Group) and environmental issues led to the election of five Green Independents in the late 1980s, who temporarily held the balance of power in State politics.

The NPWS, a State Government authority, was also instrumental in raising and supporting reserve proposals. The Franklin-Lower Gordon Wild Rivers National Park proposal came directly from the NPWS and Murrell and other enthusiastic bureaucrats in the Service worked actively towards establishing many of the reserves in the State, including Asbestos Range, Mt William, expansions to the South-West National Park and the Walls of Jerusalem. The NPWS advocated and implemented some arguably severe measures to ensure the reservation of some areas, including compulsory land acquisitions. It also bravely flew in the face of Government by opposing development plans of powerful industries and strongly advocating the conservation line.

The ABPB raised and supported proposals for some of the reserves established in the earlier years of this period. The SPB had a low profile during the 1960s and the ABPB became active in reserve promotion and was responsible for the creation of Maria Island National Park, and supporting early proposals for Mt William National Park. The Forester kangaroo reserve proposal around Mt William was initially raised by north-east farmers and was later pursued by the NPWS.

Those actively opposing reserve proposals were largely involved in natural resource based industries or were their supporters. They were backed by successive State Governments. Some opposition also came from local land owners and groups, such as horse riders and shooters, whose personal interests were at stake, for example in the case of Asbestos Range National Park. The HEC, large forestry industries and mining companies had long standing interests in the rivers, forests and geological resources of the State and had a history of being granted access to these natural resources by previous Governments. They had become powerful political players in Tasmania, who used arguments based around the financial and employment benefits the State could gain through their continued activities, to support their opposition to the creation of a number of reserves. The debates surrounding reserve proposals demonstrated that the Government was clearly in the pockets

of industry. This is also attested to by the ease at which areas were revoked from national parks during the early part of the period for forestry, mining and hydro-electric activities (Table 4.2). When one State leader (Lowe) dared to challenge the HEC, he was forced out of office.

Given the tight allegiance between the Government and industry, the conservationists actually had remarkable success in greatly expanding the reserve system. However, this was often achieved through bypassing the State Government and appealing to the Federal Government to intervene. Such was the case with the creation and expansion of the Tasmanian Wilderness World Heritage Area. This was also made possible by 'green' infiltration in State politics, which resulted in the proclamation of Douglas-Apsley National Park and the addition of some large areas sought by conservationists to the WHA in the expansions of 1989.

Table 4.2: Reserve revocations, 1971-1992. Source: Mercer, D. and Peterson, J., 1986. The revocation of national parks and equivalent reserves in Tasmania. *Search*, 17, (5-6), 134-140.

Reserve	Date	Area (hectares)
Murchison Highway State Reserve	4/6/1975	161
Steppes State Reserve	30/6/1976	1
Cradle Mtn-Lake St Clair National Park	22/2/1978	1 214
Hartz Mountains National Park	1/1/1979	2 150
King Solomon Cave State Reserve	17/3/1982	66
Corra Linn State Reserve	17/3/1982	0.57
Franklin-Lower Gordon Wild Rivers National Park	2/9/1982	14 125
Mt William National Park	28/3/1984	0.96
Stewarts Bay State Reserve	5/9/1984	0.44
Total:		17 718.97

This late period of reserve creation in Tasmania thus saw a shift towards the wilderness conservation theme and the continuation of the nature conservation theme as the dominant motives behind reserve proposals. While scenery, recreation and tourism all remained as significant arguments in the promotion of reserves, there was a relative shift away from these themes as the focus of the reserve

proponents. The wilderness theme had its roots in the later part of the middle period (1938-1970) and gained strength during the late period. The nature conservation theme, which was present from the earliest reserve proposals in the State, became more focussed during this period towards increasing the level of representation of all biological diversity in the reserve system, and addressing the biases resulting from earlier reserve selections. The period post-1970 also gave rise to widespread challenges to the dominant developmental paradigm. Although the debates and battles were often protracted, many of these challenges were successful. The firm ground on which the developers had once stood had been shaken.

ENDNOTES - CHAPTER 4

1. Animals and Birds Protection Board (ABPB), 1960. Preservation of Native Fauna. ABPB, Minutes of Meetings, 1960.
2. *Ibid.*
3. *Ibid.*
4. ABPB, Minutes of Meetings, 26/5/1960, 5/7/1960, 7/9/1960, 29/9/1960.
5. Interview with Dr Eric Guiler, 11/3/1999.
6. *Ibid.*
7. *Ibid.*
8. ABPB, Minutes of Meetings, 7/9/1960, 29/9/1960.
9. ABPB, Minutes of Meetings, 8/3/1961, 11/5/1961, 12/7/1961.
10. Interview with Dr Eric Guiler, 11/3/1999.
11. ABPB, Minutes of Meetings, 19/9/1961, 28/2/1962, 17/5/1962, 22/3/1965.
Interview with Dr Eric Guiler, 11/3/1999.
12. Correspondence: ABPB to Minister for Agriculture, 3/12/1964.
13. ABPB, Minutes of Meetings, 28/8/1967.
14. Interview with Dr Eric Guiler, 11/3/1999.
15. Correspondence: Federation of Field Naturalists' Clubs to Scenery Preservation Board (SPB), 8/5/1965.
16. Weidenhofer, M., 1977. *Maria Island. A Tasmanian Eden.* Darlington Press, Victoria, Australia.
The Mercury, 27/4/1966.
17. Interview with Dr Eric Guiler, 11/3/1999.
18. ABPB, Minutes of Meetings, 13/5/1965, 25/10/1966.
19. Interview with Dr Eric Guiler, 11/3/1999.
20. *The Mercury*, 27/7/1967.
21. ABPB, 1967. Maria Island: A Provisional Plan of Management. Minutes of Meetings, September, 1967.
22. Weidenhofer, 1972, *op. cit.*
23. ABPB, Minutes of Meetings, 6/4/1967, 13/2/1969.
24. ABPB, Minutes of Meetings, 13/2/1969, 22/5/1969.
25. Weidenhofer, 1972, *op. cit.*
26. The National Parks and Wildlife Service (NPWS), 1971. Maria Island - Case for Proclamation as a State Reserve. National Parks and Wildlife Service, Tasmania.
27. ABPB, 3/6/1971. Mt William Forester Kangaroo Reserve - Brief Outline of Case History. ABPB, Tasmania.
28. *Ibid.*

29. *Ibid.*

30. *The Mercury*, 15/9/1971, 16/9/1971, 22/11/1972.

31. ABPB, 3/6/1971. Mt William Forester Kangaroo Reserve - Brief Outline of Case History. ABPB, Tasmania.

32. *Ibid.*

33. *Ibid.*

34. Correspondence: ABPB to Australian Conservation Foundation (ACF), 4/7/1971.

35. ABPB, 3/6/1971. Mt William Forester Kangaroo Reserve - Brief Outline of Case History. ABPB, Tasmania.

36. *Ibid.*

37. Correspondence: ABPB to ACF, 4/7/1971.

38. *Ibid.*

39. ABPB, 3/6/1971. Mt William Forester Kangaroo Reserve - Brief Outline of Case History. ABPB, Tasmania.

40. *Ibid.*

Correspondence: ABPB to ACF, 4/7/1971.

41. Correspondence: National Parks and Wildlife Advisory Council to Minister for Agriculture, March 1972.

42. *The Mercury*, 15/9/1971, 16/9/1971, 22/11/1972.

43. *The Mercury*, 15/9/1971.

The North East Land Development Act, 1972, *Journals and Printed Papers of Parliament (J.P.P.P.)*, No. 31, 1972.

44. *The Mercury*, 22/11/1972.

45. Correspondence: NPWS to Forestry Commission, 3/7/1973.

46. Correspondence: Forestry Commission to NPWS, 25/6/1973.

47. Correspondence: Forestry Commission to NPWS, 5/7/1973.

48. Correspondence: NPWS to Forestry Commission, 17/7/1973.

49. Correspondence: Forestry Commission to NPWS, 13/12/1973, 27/2/1974.

50. Correspondence: North-East Tasmanian Field Naturalists Club to NPWS, 28/6/1974, 20/8/1974.

51. Correspondence: Ansons Bay Progress and Planning Association to NPWS, 15/10/1975.

52. Correspondence: Mines Department to NPWS, 26/4/1976.

Correspondence: Forestry Commission to NPWS, 11/2/1976, 20/7/1976.

53. Correspondence: Allied Manufacturing and Trading Industries Ltd to Director of Lands, 22/3/1977.

54. Correspondence: NPWS to Minister for Education, Recreation and the Arts, 3/5/1977.

55. Correspondence: Treasury Department to NPWS, 12/10/1977.
56. The *Examiner*, 11/2/1978.
The *Mercury*, 11/2/1978.
57. Correspondence: Lands Department to SPB, 7/2/1938.
58. Correspondence: Lands Department to Neil Campbell, M.H.A., 16/2/1938.
59. Correspondence: Lands Department to SPB, 15/11/1963.
Correspondence: Beaconsfield Council to Minister for Lands and Works, 7/2/1939.
60. Correspondence: Conservation Officer, Lands Department to Administration Officer, Lands Department, 3/7/1972.
61. Correspondence: Town and Country Planning Commission to NPWS, 9/11/1971.
62. Correspondence: Federation of Field Naturalists Clubs to NPWS, 28/3/1972.
63. Correspondence: Devonport Field Naturalists Club to Federation of Field Naturalists Clubs, 23/3/1972.
Correspondence: Federation of Field Naturalists Clubs to NPWS, 28/3/1972.
64. Correspondence: Federation of Field Naturalists Clubs to NPWS, 28/3/1972.
65. Correspondence: Devonport Field Naturalist Club to Federation of Field Naturalists Clubs, 23/3/1972.
66. Correspondence: Asbestos Range Regional Park Sub-Committee to NPWS, 24/10/1972.
67. *Ibid.*
68. *Ibid.*
69. Correspondence: Town and Country Planning Commission to NPWS, 14/12/1973.
70. Correspondence: NPWS to Tamar Regional Master Planning Authority, 6/3/1974.
71. Correspondence: NPWS to Minister for National Parks and Wildlife, 14/3/1975.
72. The *Mercury*, 18/4/1974.
73. Correspondence: NPWS to Minister for National Parks and Wildlife, 14/3/1975.
74. Correspondence: Tasmanian Conservation Trust (Northern Branch) to NPWS, 30/5/1975.
75. Correspondence: NPWS to Minister for National Parks and Wildlife, 6/2/1975.
76. The *Examiner*, 17/1/1975.
77. Correspondence: NPWS to Beaconsfield Council, 6/2/1975.
Correspondence: NPWS to Minister for National Parks and Wildlife, 14/3/1975.
78. The *Examiner*, 18/2/1975.
79. *Ibid.*
80. Correspondence: NPWS to Minister for National Parks and Wildlife, 14/3/1975.
81. *Ibid.*
82. *Ibid.*
83. *Ibid.*

84. *Ibid.*
85. *The Examiner*, 12/4/1975.
86. *The Examiner*, 15/2/1975.
- The Examiner*, 31/5/1975.
87. *The Mercury*, 31/5/1975.
88. Correspondence: Beaconsfield Council to NPWS, 16/5/1975.
89. *The Examiner*, 4/6/1975.
90. *The Examiner*, 31/5/1975.
91. Correspondence: Bell Respiro Pty Ltd to Minister for National Parks and Wildlife, 5/6/1975.
92. Correspondence: NPWS to Minister for National Parks and Wildlife, 27/8/1975.
93. Correspondence: Port of Launceston Authority to Minister for National Parks and Wildlife, 11/8/1975.
94. Correspondence: Investigations Officer, NPWS to Director, NPWS (undated).
95. Correspondence: Forestry Commission to NPWS, 20/11/1975.
96. Correspondence: Mines Department to NPWS, 28/5/1976.
97. *Ibid.*
98. Correspondence: Investigations Officer, NPWS to Director, NPWS, 8/6/1976.
99. Gee, H. M., 1983. The evolving consciousness. In: Gee, H. and Fenton, J., (Eds.), *The South West Book*. Third Edition. Collins, Sydney and the Australian Conservation Foundation, Melbourne, 239-250.
100. Robson, L., 1991. *A History of Tasmania, Volume Two*. Oxford University Press, Melbourne.
101. Jones, D., (Ed.), 1972. *Lake Pedder. Why a National Park Must be Saved*. The Griffin Press, Adelaide.
- Robson, 1991, *op. cit.*
102. Jones, D., 1981. Politicians have come to think that anything goes. In: Green, R., *Battle for the Franklin. Conversations with the Combatants in the Struggle for South West Tasmania*. Australian Conservation Foundation, 50-68.
- Thompson, P., 1984. *Bob Brown of the Franklin River*. George Allen and Unwin Australia Pty Ltd.
103. Australian Conservation Foundation, 1972. *Pedder Papers. Anatomy of a Decision*. Australian Conservation Foundation, Victoria.
- The Australian*, 7/4/1972.
- The Mercury*, 15/4/1972.
- The Mercury*, 21/4/1972.
104. Thompson, 1984, *op. cit.*
105. Lowe, D., 1984. *The Price of Power*. The MacMillan Company of Australia Pty Ltd.

106. St John, E., 1974. Supplementary statement. In: The Parliament of the Commonwealth of Australia, 1974. *Final Report of the Lake Pedder Committee of Inquiry on the Flooding of Lake Pedder*. Parliamentary Paper No. 104. Government Printer of Australia, 181-196.
107. Jones, 1972, *op. cit.*
108. Jones, 1972, *op. cit.*, p36.
109. Reece, E., 1981. God gave us the earth to use and care for. In: Green, R., *Battle for the Franklin. Conversations with the combatants in the Struggle for South West Tasmania*. Australian Conservation Foundation, Melbourne, 26-38.
- Robson, 1991, *op. cit.*
110. The Parliament of the Commonwealth of Australia, 1974. *Final Report of the Lake Pedder Committee of Inquiry on the Flooding of Lake Pedder*. Parliamentary Paper No. 104. Government Printer of Australia.
111. Lowe, 1984, *op. cit.*
- Gee, 1983, *op. cit.*
- Robson, 1991, *op. cit.*
112. Robson, 1991, *op. cit.*, p552.
113. Lowe, 1984, *op. cit.*
114. Gee, 1983, *op. cit.*
- Robson, 1991, *op. cit.*
- St John, 1974, *op. cit.*
115. Robson, 1991, *op. cit.*
- Lowe, 1984, *op. cit.*
116. NPWS, 1975. *Draft Management Plan for the Southwest National Park Tasmania*. NPWS.
117. South-West Advisory Committee, 1976. Submissions to the South-West Advisory Committee on the Southwest National Park Draft Management Plan.
118. Saunders, R. E., 1983. An evaluation of the Tasmanian Government's 1975 Draft Management Plan for the Southwest National Park. In: Gee, H. and Fenton, J., 1983. *The South West Book*. Third Edition. Collins, Sydney and the Australian Conservation Foundation, Melbourne, 254-255.
119. NPWS, 1975, *op. cit.*
120. Wessing, P., 1983. The Precipitous Bluff case. In: Gee, H. and Fenton, J., 1983. *The South West Book*. Third Edition. Collins, Sydney and the Australian Conservation Foundation, Melbourne, 263-265.
121. *Ibid.*
122. Kiernan, K., 1981. All over the bloody floor were stone tools and I had just never noticed. In: Green, R., *Battle for the Franklin. Conversations with the combatants in*

the Struggle for South West Tasmania. Australian Conservation Foundation, Melbourne, 82-99.

123. Interview with Professor Jamie Kirkpatrick, 16/10/1998.

124. Correspondence: The South West Committee to the BHP Co. Ltd, 10/11/1972.

125. Tasmanian Conservation Trust, 1972. *The New River/Precipitous Bluff Area*. A report to the Federal Minister for the Environment by the Tasmanian Conservation Trust, Hobart.

126. *The Huon News*, 18/12/1975.

127. Harwood, C., 1983. *The Precipitous Bluff-Hartz swap*. In: Gee, H. and Fenton, J., 1983. *The South West Book*. Third Edition. Collins, Sydney and the Australian Conservation Foundation, Melbourne, 203.

128. Australian Paper Manufacturers, 1975. Submission to the South-West Advisory Committee on the Southwest National Park Draft Management Plan.

129. The South-West Advisory Committee, 1976. Submissions to the South-West Advisory Committee on the Southwest National Park Draft Management Plan. Hobart.

130. South-West Advisory Committee, 1976. *Preliminary Report to the Minister for National Parks and Wildlife*. Hobart.

131. Wessing, 1983, *op. cit.*

132. *The Mercury*, 15/10/1976.

The Examiner, 27/8/1976, 13/10/1976, 18/10/1976.

133. Australian Conservation Foundation, 1975. Submission to the South-West Advisory Committee on the Southwest National Park Draft Management Plan.

134. Mineral Holdings Australia Pty Ltd, 1975. Submission to the South-West Advisory Committee on the Southwest National Park Draft Management Plan.

135. Australian Conservation Foundation, 1976. Submission to the South-West Advisory Committee on the Southwest National Park Draft Management Plan.

136. *Ibid.*

137. NPWS, 1976. Submission to the South-West Advisory Committee on the Southwest National Park Draft Management Plan.

138. *The Examiner*, 27/7/1976.

The Mercury, 30/7/1976.

139. Tasmanian Timber Association, 1975. Submission to the South-West Advisory Committee on the Southwest National Park Draft Management Plan.

140. H. Jones and Co. Pty Ltd, 1975. Submission to the South-West Advisory Committee on the Southwest National Park Draft Management Plan.

The Geeveston Branch of the Tasmanian Field and Game Association, 1975. Submission to the South-West Advisory Committee on the Southwest National Park Draft Management Plan.

141. Lowe, 1984, *op. cit.*
142. St John, 1974, *op. cit.*
143. Jones, 1981, *op. cit.*
144. Kiernan, 1981, *op. cit.*
145. *Ibid.*
146. Thompson, 1984, *op. cit.*
- Kiernan, 1981, *op. cit.*
147. *Ibid.*
148. Thompson, 1984, *op. cit.*
149. Kiernan, 1981, *op. cit.*
150. Lowe, 1984, *op. cit.*
151. *Ibid.*
152. South-West Advisory Committee, 1978. *Report to the Minister for National Parks and Wildlife.* Hobart.
153. *The Weekend Australian*, 24-25/3/1979.
The Examiner, 20/9/1978, 23/9/1978, 22/3/1979, 24/3/1979.
Davis, B. W. and Gee, H. M., 1983. The South-West Advisory Committee. In: Gee, H. and Fenton, J., 1983. *The South West Book*. Third Edition. Collins, Sydney and the Australian Conservation Foundation, Melbourne, 255-256.
154. The Hydro-Electric Commission, 1979. *Report on the Gordon River Power Development Stage Two*. A report to the Premier, Minister Administering the Hydro-Electric Commission Act. The Hydro-Electric Commission, Tasmania.
155. Lowe, 1984, *op. cit.*
The Hydro-Electric Commission, 1979, *op. cit.*
156. *The National Times*, 17/3/1979.
157. *Ibid.*
158. *The Mercury*, 14/6/1980
Lowe, 1984, *op. cit.*
159. NPWS, 1979. *A Proposal for a Wild River National Park: The Franklin-Lower Gordon Rivers*. A submission to the Minister for National Parks and Wildlife by the NPWS, Tasmania.
160. NPWS, 1979, *op. cit.*
161. *The Mercury*, 7/6/1980.
162. *The Mercury*, 1/7/1980, 8/7/1980.
163. *The Mercury*, 1/7/1980.
164. Lowe, 1984, *op. cit.*
165. *The Mercury*, 8/7/1980.
Lowe, 1984, *op. cit.*

166. The *Examiner*, 19/12/1908.
The *Advocate*, 19/12/1980.
167. The *Advocate*, 20/12/1980.
168. The *Mercury*, 3/7/1980.
169. The *Australian*, 24/12/1980, 21/1/1981.
170. Tasmanian Government and Australian Heritage Commission, 1981. *Nomination of Western Tasmania Wilderness National Parks by the Commonwealth of Australia for Inclusion in the World Heritage List*. Tasmanian Government and Federal Government of Australia.
171. Lowe, 1984, *op. cit.*
Robson, 1991, *op. cit.*
172. Lowe, 1984, *op. cit.*
Thompson, 1984, *op. cit.*
173. Lowe, 1984, *op. cit.*
174. The *Mercury*, 14/12/1981.
Thompson, 1984, *op. cit.*
Robson, 1991, *op. cit.*
175. Tasmanian Government and Australian Heritage Commission, 1981, *op. cit.*
176. Robson, 1991, *op. cit.*
Thompson, 1984, *op. cit.*
177. Lowe, 1984, *op. cit.*
178. Thompson, 1984, *op. cit.*
Connolly, B., 1981. *The Fight for the Franklin. A Story of Australia's Last Wild River*. Cassell Australia Ltd, NSW and Victoria.
Green, R., 1981. *Battle for the Franklin. Conversations with the Combatants in the Struggle for South West Tasmania*. Australian Conservation Foundation, Melbourne.
The Blockaders, 1983. *Franklin Blockade*. The Wilderness Society, Hobart.
179. Robson, 1991, *op. cit.*
Lowe, 1984, *op. cit.*
Thompson, 1984, *op. cit.*
180. Lowe, 1984, *op. cit.*
181. *Ibid.*
182. The *Advocate*, 2/7/1983.
The Blockaders, 1983, *op. cit.*
Thompson, 1984, *op. cit.*
183. The Wilderness Society, 1984. *The Proposal for a Western Tasmania National Park*. The Wilderness Society, Melbourne.

The Wilderness Society, 1984. *Greenprint for a World-Class National Park. Proposal for a Western Tasmania National Park, Part 1*. The Wilderness Society, Melbourne.

184. *Ibid.*

185. Mercer, D., 1991. *A Question of Balance*. The Federation Press, NSW.

Dargavel, J., 1984. Pulp and paper monopolies in Tasmania. In: Taylor, M., (Ed.), *A Geography of Corporate Power*, 69-89.

186. Hutton, D. and Connors, L., 1999. *A History of the Australian Environment Movement*. Cambridge University Press.

187. The Wilderness Society, 1985. *Wilderness News*, 6, (8), p2.3

188. *The Weekend Australian*, 8-9/3/1986.

189. The Wilderness Society, 1984, *op. cit.*

190. Hutton and Connors, 1999, *op. cit.*

191. Mercer, 1991, *op. cit.*

192. *Ibid.*

193. Department of the Arts, Sport, the Environment, Tourism and Territories, 1988. *Report of the Commission of Inquiry into the Lemonthyme and Southern Forests. Volume 1*. Australian Government Publishing Service, Canberra.

194. Interview with Professor Jamie Kirkpatrick, 16/10/1998.

The Age, 25/5/1988.

195. Mercer, 1991, *op. cit.*

196. Hutton and Connors, 1999, *op. cit.*

197. Interview with Professor Jamie Kirkpatrick, 16/10/1998.

198. *Ibid.*

199. *Ibid.*

200. *Ibid.*

201. The Australian Conservation Foundation, the Wilderness Society and the Tasmanian Conservation Trust, 1988. *Western Tasmania Stage 2 World Heritage. A Draft Nomination*. Australian Conservation Foundation, Wilderness Society and Tasmanian Conservation Trust.

202. *The Tribune*, 31/5/1989.

Hutton and Connors, 1999, *op. cit.*

203. Media Release, 15/9/1989. Senator Graham Richardson, Minister for the Arts, Sport, the Environment, Tourism and Territories.

204. Interview with Professor Jamie Kirkpatrick, 16/10/1998.

The Examiner, 6/9/1989.

205. SPB, Minutes of Meetings, 2/5/1946, 14/6/1946, 8/10/1946.

206. SPB, Minutes of Meetings, 8/10/1946.

207. SPB, Minutes of Meetings, 14/8/1953.

208. SPB, Minutes of Meetings, 5/10/1962.
209. SPB, Minutes of Meetings, 5/7/1963, 4/6/1965.
210. Shepherd, R., Winkler, C. and Jones, R., 1975. Management of the Central Plateau of Tasmania as a Conservation Area. Paper presented at a symposium on Management of Terrestrial Ecosystems, Ecological Society of Australia, Brisbane, May 1975.
211. SPB, Minutes of Meetings, 4/6/1965.
212. Australian Conservation Foundation, 1969. *The High Country*. Viewpoint Series 4. Australian Conservation Foundation, Melbourne.
213. Shepherd, Winkler and Jones, 1975, *op. cit.*
214. Banks, M. R., (Ed.), 1972. *The Lake Country*. A symposium conducted by the Royal Society of Tasmania at Poatina, Tasmania, November 11-12, 1972.
215. Jetson, T., 1987. The Roof of Tasmania. The History of the Central Plateau. Master of Arts Thesis, University of Tasmania.
- Jackson, W. D., 1972. Vegetation of the Central Plateau. In: Banks, M. R., (Ed.), *The Lake Country*. A symposium conducted by the Royal Society of Tasmania at Poatina, Tasmania, November 11-12, 1972, 61-85.
- Costin, A. B., 1972. Characteristics and use of Australian high country. In: Banks, M. R., (Ed.), *The Lake Country*. A symposium conducted by the Royal Society of Tasmania at Poatina, Tasmania, November 11-12, 1972, 1-23.
216. Jackson, 1972, *op. cit.*
217. Ashton, J. R., 1972. Water resources and power development on the Central Plateau. In: Banks, M. R., (Ed.), *The Lake Country*. A symposium conducted by the Royal Society of Tasmania at Poatina, Tasmania, November 11-12, 1972, 183-192.
218. Banks, 1972, *op. cit.*
219. Shepherd, Winkler and Jones, 1975, *op. cit.*
220. Jetson, 1987, *op. cit.*
221. Shepherd, Winkler and Jones, 1975, *op. cit.*
222. Costin, 1972, *op. cit.*
223. Shepherd, Winkler and Jones, 1975, *op. cit.*
224. Lands Department, 1976. *Management Plan for the Central Plateau Protected Area*. Lands Department, Hobart.
225. Jetson, 1987, *op. cit.*
- Lands Department, 1978. *Management Plan for the Central Plateau Protected Area*. Lands Department, Hobart.
226. Jetson, 1987, *op. cit.*
227. Russell, J. A., Matthews, J. H. and Jones, R., 1979. Wilderness in Tasmania. A report to the Australian Heritage Commission. *Centre for Environmental Studies Occasional Paper No. 10*, University of Tasmania.

228. *Ibid.*
229. Department of Parks, Wildlife and Heritage, 1992. *Douglas-Apsley National Park. Draft Management Plan.*
230. *Ibid.*
231. Kirkpatrick, J. B. and Moscal, A. and Brown, M. J., 1980. *Threatened Plants of the Central East Coast.* Tasmanian Conservation Trust, Hobart.
232. Tasmanian Wilderness Society, 1981. *Douglas River National Park Proposal.* Tasmanian Wilderness Society, Hobart.
233. Duncan, F., 1983. Plant Communities of the Douglas River Region. *Wildlife Division Technical Report 83/3.* National Parks and Wildlife Service, Tasmania.
- Duncan, F. and Brown, M. J., 1985. Dry Sclerophyll Vegetation in Tasmania. *Wildlife Division Technical Report 86/2.* National Parks and Wildlife Service, Tasmania.
234. Tasmanian Conservation Trust, Forest Action Network, Wilderness Society and Australian Conservation Foundation, 1984. *The Douglas-Apsley National Park.* A proposal prepared and presented by the Australian Conservation Foundation, Tasmanian Conservation Trust, Wilderness Society and Forest Action Network.
235. *Ibid.*
236. The Wilderness Society (undated). *The Proposed Douglas-Apsley National Park* (Brochure).
237. *The Mercury*, 19/12/1989.
238. Department of Parks, Wildlife and Heritage, 1992, *op. cit.*
The Mercury, 19/12/1989.
The Examiner, 19/12/1989.
239. *The Mercury*, 15/12/1989, 19/12/1989, 20/12/1989, 22/12/1989.
The Advocate, 20/12/1989.
240. Interview with Professor Jamie Kirkpatrick, 16/10/1998.
241. Frawley, K., 1988. The history of conservation and the national park concept in Australia: a state of knowledge review. In: Frawley, K. and Semple, N., (Eds.), *Australia's Ever Changing Forests.* Australian Defence Force Academy, Canberra, A.C.T., 395-417.
- Mosley, G., (Ed.), 1978. *Australia's Wilderness Conservation and Progress.* Fontana and Australian Conservation Foundation, Melbourne.
- Mosley, J. G. and Messer, J., (Eds.), 1984. *Fighting for Wilderness.* Fontana and Australian Conservation Foundation, Melbourne.
- Connolly, 1981, *op. cit.*
- Gee and Fenton, 1983, *op. cit.*
- Hutton and Connors, 1999, *op. cit.*
- Thompson, 1984, *op. cit.*

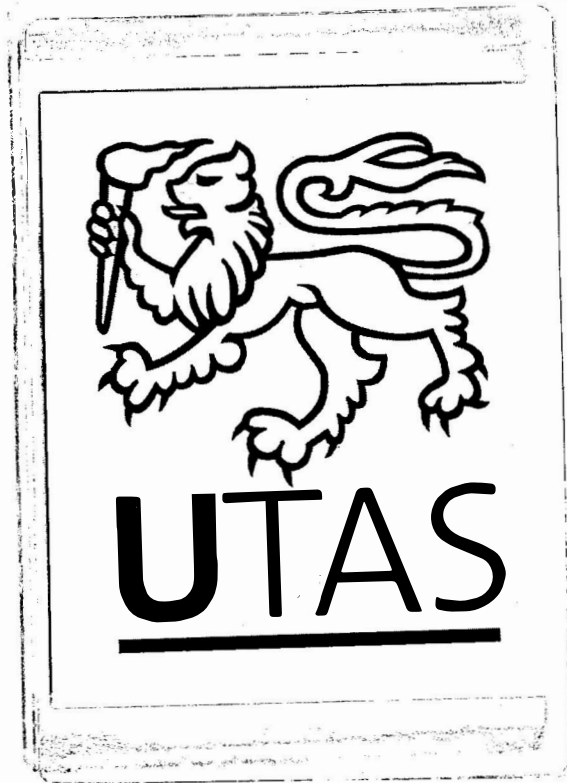
242. Burgmann, V., 1993. *Power and Protests: Movements for Change in Australian Society*. Allen and Unwin, London.

Davis, B. W., 1981. *Characteristics and Influence of the Australian Conservation Movement: An Examination of Selected Conservation Controversies*. Unpublished PhD Thesis, University of Tasmania.

Lowe, P. and Goyder, J., 1983. *Environmental Groups in Politics*. George Allen and Unwin, Sydney.

Hutton and Connors, 1999, *op. cit.*

Frawley, 1988, *op. cit.*



PART 2

The Representation of Biodiversity, Scenery and Wilderness in Tasmanian National Parks, 1916-1992

CHAPTER 5

Biodiversity

Introduction

The conservation of biological diversity (biodiversity) has become an issue of global significance.¹ National parks have historically played an important role in the protection of nature and its diversity. This chapter examines the representation of biodiversity within Tasmanian national parks and equivalent reserves over three historic periods. The specific aims are:

- determine the representation of biodiversity in reserves proclaimed during the three historic time-slices of 1916-1937, 1938-1970 and 1971-1992;
- assess whether the relative significance of biodiversity conservation in reserves has shifted in emphasis over time;
- provide data to determine the relative significance of biodiversity conservation in relation to that of scenery (Chapter 6) and wilderness (Chapter 7) conservation over time.

Simply stated, biodiversity is the variety and variability among living organisms and the ecological complexes in which they occur. Current literature identifies three levels of biodiversity: genetic diversity - the sum total of all genetic information, contained in the genes of all life on earth; species (organismal) diversity - the variety of living organisms on earth; and ecosystem diversity - the variety of habitats, communities and ecological processes in the biosphere, including diversity between and within ecosystems.²

In this study, the scale of enquiry is large, with the state of Tasmania being the geographical area under investigation. A meaningful

measure of the representation of biodiversity in Tasmanian reserves must be at a similar scale. Given this statewide resolution and the large historic component to the thesis, it would be inappropriate to consider the genetic or species levels of biodiversity. This would also prove impractical as complete distributional data sets for the whole State are unavailable.

Mapped vegetation types are used as the measure of biodiversity in this study. It is considered that the greater the variety and extent of mapped vegetation types represented within reserves, the greater the likelihood of the representation of other elements of biodiversity. However, this is not to assert that there is a perfect correlation between plant community and fauna distributions, as some research has shown that this is not the case.³

It has long been recognised in Tasmania that the representation of biodiversity in the State's reserve system has been biased towards particular vegetation types, while others have been (and continue to be) significantly under-represented.⁴ However, with the exception of the most recent period in this study, historic representations of plant communities and vegetation types in Tasmanian reserves, and changes to these over time, have never before been calculated.

The first assessment of plant community conservation in Tasmania was in the early 1970s, at which time there began a number of systematic studies that documented and described the State's plant communities and vegetation types.⁵ Prior to these studies, in the absence of statewide distributional data, it was not possible to quantify and meaningfully assess the extent of vegetation conservation in the reserve system. It was not until the 1980s that the State's first larger scale vegetation distribution map was produced (1984).⁶

The study in this chapter thus addresses a gap in knowledge about the history of vegetation conservation in Tasmania, through calculating and assessing historic representations of vegetation in reserves over time. This is significant in its own right and essential to addressing the specific aims of this chapter and the broader themes of this thesis.

Methods

Published maps showing the distribution of plant communities and vegetation types in Tasmania were used as the data sources for this analysis. Recent mapping exercises (1996) comprising part of the Tasmania-Commonwealth Regional Forest Agreement (RFA) resulted in the production of a 1:250 000 map series showing the distribution of Tasmanian forest communities across the whole state.⁷ These maps have provided a higher resolution of mapped detail for a greater number of forest communities (50 defined communities) than was previously available. The RFA maps were used to calculate areas of different forest communities represented in reserves across the three historic periods.

The lack of direct economic significance of non-forest vegetation in Tasmania means that these vegetation types have not been afforded an equivalent level of mapping detail, although this is currently being addressed. Some vegetation types, such as grasslands, are also difficult to map at the larger scale at the plant community level. However, distributional data on non-forest vegetation types are available on the map, *Vegetation of Tasmania* (1984) which at the time of this study, was the only compilation of vegetation distributions available at the statewide scale.⁸ This map, published at the scale of 1:500 000 was used to calculate areas of non-forest vegetation types in reserves.

The boundaries of national parks and equivalent reserves established in each of the three historic periods were overlain on these maps. Areas of different forest communities and vegetation types were calculated directly from the maps, using the grid-cell method. The RFA forest vegetation maps have a high level of mapping detail. Grid squares with dimensions of 1 mm x 1 mm were used to calculate areas, providing a high degree of resolution. In some instances, it was necessary to change the scale of the the RFA maps from 1:250 000 to 1:125 000, in order to avoid significant loss of data.

The grid-cell method was found to be more accurate for calculating areas than the use of other mechanical methods, such as the planimeter (checked by comparing summed areas of vegetation types against total

reserve area). Gaining access to the maps in digital form at the time of this study was not practical (the Regional Forest Agreement in Tasmania was still in progress). This, combined with a considerable amount of minor adjustments being made to reserve boundaries (historic area calculations of reserves and formally gazetted boundaries did not always prove accurate, particularly for those early reserves that were not originally mapped) meant that the grid-cell method was the most accessible, accurate and practical at the time of this study.

The areas of different forest communities and vegetation types were calculated for all national parks and equivalent reserves occurring in each of the three historic periods (published data were available for current reserves). Data at the plant community level (forest communities) were analysed separately, then summed and grouped into vegetation types, to produce consistent and comparative data for the end of each period. Changes to reserve boundaries within periods, including additions and revocations, were incorporated in the final sums for each forest community and vegetation type.

This study is of historic representations of vegetation in reserves proclaimed between 1916 and 1992. There is no statewide vegetation data available specifically for the historic periods under investigation, and the compilation of such would require extensive research, which is beyond the scope and aims of this thesis. However, current and pre-European estimated extents of forest communities (Table 5.1) and vegetation types (Table 5.2) have been calculated for Tasmania.⁹ The pre-European extents of forest coverage are based on pre-1750 estimates, and the extent of pre-European vegetation types is based on first settlement estimates (1802).

The representations of forest communities and vegetation types within reserves over the three historic periods are analysed against both contemporary and pre-European estimated forest community and vegetation type areas across the State. Methods currently employed in Tasmania to determine reservation adequacy, use pre-European data as the base for assessment.¹⁰

Extensive vegetation clearance has taken place in Tasmania since European occupation (Table 5.1 and 5.2). However, the areas subject to investigation in this thesis are specifically of largely uncleared areas. As such, it can reasonably be assumed that the vegetation contained inside reserves has not undergone major change, at least of the extent that would render the methods employed in this study invalid. Most land clearance has taken place outside of reserves. The most significant change to vegetation patterns in reserves has been through fire, with some large areas of sensitive rainforest burnt in the fires of 1934, and smaller losses incurred through other fires throughout the century.

The forest community data (Table 5.1) show some enormous losses in areas of individual forest communities since European settlement. The mean loss over the 50 defined forest communities in the State is 40%, and is commensurate with the overall loss of statewide forest vegetation (41%). However, there is enormous variation in the data, with some individual communities incurring up to 98% reduction in area since occupation. Such huge losses clearly indicate the value of land previously occupied with forests for agricultural and other uses.

Table 5.1: Current and pre-European estimated statewide extents of forest communities, with areas lost since European settlement. Source: Tasmania-Commonwealth Regional Forest Agreement, 1996. *Environment and Heritage Report Vol. 1*. Tasmanian Public Land Use Commission.

Forest Community	Current area (ha)	Pre-European area (ha)	Loss (ha)	% loss
Dry eucalypt forests				
Coastal <i>Eucalyptus amygdalina</i>	191000	361300	170300	47
<i>E. amygdalina</i> on dolerite	177300	286900	109600	38
<i>E. amygdalina</i> inland	21900	65700	43800	67
<i>E. amygdalina</i> on sandstone	32700	65800	33100	50
<i>E. viminalis</i> - <i>E. ovata</i> - <i>E. amygdalina</i> - <i>E.obliqua</i> damp	40100	80000	39900	50
Grassy <i>E. globulus</i>	13500	23700	10200	43
<i>E.pulchella</i> - <i>E. globulus</i> - <i>E. viminalis</i> grassy/shrubby forest	152700	227200	74500	33
<i>E. viminalis</i> grassy	110800	223900	113100	51
<i>E. viminalis</i> + or - <i>E. globulus</i> coastal	1300	7600	6300	83
<i>E. tenuiramis</i> on granite	3000	3000	0	0
<i>E. tenuiramis</i> on dolerite	8300	10000	1700	17

Table 5.1 cont.

Forest Community	Current area (ha)	Pre-European area (ha)	Loss (ha)	% loss
Inland <i>E. tenuiramis</i>	56900	164700	107800	65
<i>E. sieberi</i> on granite	17700	20600	2900	14
<i>E. sieberi</i> on other substrates	46200	61300	15100	25
<i>E. obliqua</i>	160700	288200	127500	44
<i>E. nitida</i>	159700	260800	101100	39
<i>E. delegatensis</i>	293300	353200	59900	17
<i>E. pauciflora</i> on dolerite	19000	27400	8400	31
<i>E. pauciflora</i> on sediments	18300	41200	22900	56
Furneaux <i>E. nitida</i>	29800	77100	47300	61
Furneaux <i>E. viminalis</i>	140	33800	33660	100
Shrubby <i>E. ovata</i>	7500	188800	181300	96
<i>E. rodwayi</i>	6900	18100	11200	62
<i>E. risdonii</i>	560	560	0	0
<i>E. morrisbyi</i>	20	20	0	0
Sub-alpine eucalypt forests				
<i>E. coccifera</i> sub-alpine	54300	58400	4100	7
<i>E. subcrenulata</i> sub-alpine	10200	11000	800	7
Wet eucalypt forests				
<i>E. obliqua</i>	422000	655500	233500	36
<i>E. regnans</i>	74800	95200	20400	21
<i>E. nitida</i>	74400	118400	44000	37
<i>E. delegatensis</i>	284600	355500	70900	20
<i>E. brookerana</i>	4600	15700	11100	71
King Island <i>E. globulus</i> - <i>E. brookerana</i> - <i>E. viminalis</i>	2400	152800	150400	98
<i>E. viminalis</i>	3600	49000	45400	93
Non-eucalypt dry forests				
<i>Allocasuarina verticillata</i> forest	1300	6000	4700	78
<i>Notolea ligustrina</i> and/or <i>Pomaderris apetala</i> closed forest	290	430	140	33
<i>Callitris rhomboidea</i> forest	790	930	140	15
<i>Banksia serrata</i> woodland	80	80	0	0
Non-eucalypt wet forests				
Pencil pine - deciduous beech	3830	4500	670	15
Pencil pine	2050	5600	3550	63
King Billy pine	18160	20000	1840	9
King Billy pine - deciduous beech	780	800	20	3
Huon pine	10570	13100	2530	19
Tall rainforest	192000	252000	60000	24
Short rainforest	368700	507400	138700	27
<i>Acacia dealbata</i>	54100	55700	1600	3
<i>A. melanoxylon</i> on flats	9000	14900	5900	40
<i>A. melanoxylon</i> on rises	13300	26200	12900	49
<i>Leptospermum lanigerum</i> - <i>Melaleuca squarrosa</i> swamp forest	18900	32900	14000	43
<i>Melaleuca ericifolia</i> coastal swamp forest	600	38200	37600	98
Total	3194700	5381549	2186849	41

The areas of current and pre-European vegetation types in Tasmania (Table 5.2), similarly show massive decreases in statewide extents since European settlement. This is particularly the case for those vegetation types that are of direct or indirect economic significance. While dry eucalypt forest, wet eucalypt forest, swamp forest and rainforest all show large decreases in area (as in Table 5.1), coastal heathlands, grasslands and wetlands similarly show significant decreases. Many of these vegetation types typically occur in lowland areas, and are often concentrated on land of economic value, particularly for agriculture. For example, the grassy open Midlands of Tasmania was occupied early in the process of settlement, as it offered land readily utilised for grazing.¹¹

Table 5.2: Current and pre-European statewide extents of vegetation types, with areas lost since European settlement. Source: Tasmania-Commonwealth Regional Forest Agreement, 1996. *Environment and Heritage Report Vol. 1*. Tasmanian Public Land Use Commission; Kirkpatrick, J. B., Barker, P., Brown, M. J. Harris, S. and Mackie, R., 1995. The reservation status of Tasmanian vascular plant communities. *Wildlife Scientific Report 95/4*. Parks and Wildlife Service, Tasmania.

Vegetation type	Current area (ha)	Pre-European area (ha)	Loss (ha)	% loss
Dry eucalypt forest/woodland	1571490	2898319	1326829	46
Buttongrass moorland/scrub	1140000	1150000	10000	1
Wet eucalypt forest	953370	1552000	598630	39
Rainforest	560990	759830	198840	26
Coastal heathland	225510	425800	200290	47
Alpine/subalpine	202820	215300	12480	6
Grassland	51000	85000	34000	40
Swamp forest	19500	39000	19500	50
Wetland	16500	24500	8000	33
Saltmarsh	3300	4000	700	18
Total	4744480	7153749	2409269	34

While absolute areas of vegetation types in the State have decreased enormously since European settlement, the changes are not as significant to relative percentage areas (Table 5.3). Currently, one third of the vegetation in the state (33.1%) consists of dry eucalypt forests and woodlands; one quarter (24%) is buttongrass moorland and scrub; one fifth is represented by wet eucalypt forests (20.1%); and 11.9% is rainforest. Coastal heathlands and alpine/subalpine communities comprise 4.8% and 4.3% respectively. All other vegetation types (grassland, swamp forest, wetland and saltmarsh) together total less than 2% of statewide vegetation.

Table 5.3: Current and pre-European areas of vegetation types, expressed as a percentage of total statewide vegetation.

Vegetation type	% of current statewide area	% of pre-European statewide area
Dry eucalypt forest/woodland	33.1	40.5
Buttongrass moorland/scrub	24.0	16.1
Wet eucalypt forest	20.1	21.2
Rainforest	11.9	10.6
Coastal heathland	4.8	6.0
Alpine/subalpine	4.3	3.0
Grassland	1.1	1.2
Swamp forest	0.4	0.5
Wetland	0.3	0.3
Saltmarsh	0.1	0.1

Estimates of pre-European vegetation extents (Table 5.3) indicate that dry eucalypt forest/woodland comprised a greater percentage area of total vegetation (40.5%) than at present. Wet eucalypt forest had a greater proportional area in the pre-settlement era (21.2%) than buttongrass moorland/scrub (16.1%). The relative percentage area of alpine/subalpine vegetation was slightly less in the pre-European era than in current patterns. All other vegetation types have only small or no significant differences in relative percentage areas to contemporary patterns.

Results

The representation of forest communities in reserves

At the end of the early period (1937), a total of 65 193 ha of forest vegetation was represented in national parks and equivalent reserves (Table 5.4), including representation of 25 of the State's 50 forest communities (50%). While a relatively large number of communities were represented in reserves, the extent of the larger portion of these was very small relative to the total forest area reserved.

Only 11 of the 25 forest communities (44%) had reserved areas greater than 1 000 ha, with only two (8%) having reserved areas over 10 000 ha (Table 5.4). In terms of absolute areas, forest vegetation occurring in reserves was overwhelmingly dominated by few communities. Short rainforest and *E. delegatensis* wet eucalypt forest comprised 43% of the total. These two communities, together with *E. coccifera* sub-alpine forest and *E. delegatensis* dry sclerophyll forest accounted for nearly 70% (45 055 ha) of the total reserved forest area. Twenty one of the reserved communities (84%) represented only 30% of the total area reserved.

The communities reserved in this early period typically occur in high altitude areas of the State, representing a considerable bias in the early reservation of forest vegetation. This pattern continued through the middle period. By 1970, 193 691 ha of forest vegetation was reserved - an increase of 197% from 1937. However, while the absolute area of reserved forest vegetation increased substantially between 1937 and 1970, the number of forest communities represented increased by only 20%, or an additional five communities (Table 5.4).

Fourteen of the 30 represented forest communities (47%) had reserved areas of less than 1 000 ha, while only seven communities (23%) had areas greater than 10 000 ha and four greater than 20 000 ha (13%). Most significant in absolute area reserved were short rainforest, *E. delegatensis* wet eucalypt forest, *E. delegatensis* dry eucalypt forest, *E. nitida* dry eucalypt forest and *E. coccifera* subalpine forest, which together comprised 71% (138 464 ha) of the total area reserved. Twenty

five (83%) of the communities reserved shared less than 30% of the total.

Table 5.4: Cumulative representation of forest communities in reserves over three historic periods.

Forest Community	1937		1970		1992	
	Area (ha)	% of total	Area (ha)	% of total	Area (ha)	% of total
Dry eucalypt forests						
Coastal <i>Eucalyptus amygdalina</i>	1319	2.0	1413	0.7	21150	3.3
<i>E. amygdalina</i> on dolerite	483	0.7	857	0.4	7120	1.1
<i>E. amygdalina</i> inland	0	0	0	0	700	0.1
<i>E. amygdalina</i> on sandstone	0	0	5	0	910	0.1
<i>E. viminalis</i> - <i>E. ovata</i> - <i>E. amygdalina</i> - <i>E. obliqua</i> damp	0	0	0	0	4100	0.6
Grassy <i>E. globulus</i>	1194	1.8	1194	0.6	3270	0.5
<i>E. pulchella</i> - <i>E. globulus</i> - <i>E. viminalis</i> grassy/shrubby forest	519	0.8	626	0.3	7370	1.1
<i>E. viminalis</i> grassy	275	0.4	275	0.1	520	0.1
<i>E. viminalis</i> + or - <i>E. globulus</i> coastal	0	0	0	0	260	0
<i>E. tenuiramis</i> on granite	844	1.3	846	0.4	1310	0.2
<i>E. tenuiramis</i> on dolerite	0	0	0	0	2140	0.3
Inland <i>E. tenuiramis</i>	0	0	169	0.1	1640	0.3
<i>E. sieberi</i> on granite	0	0	205	0.1	570	0.1
<i>E. sieberi</i> on other substrates	0	0	0	0	2970	0.5
<i>E. obliqua</i>	1426	2.2	2700	1.4	16950	2.6
<i>E. nitida</i>	2082	3.2	20652	10.7	94110	14.6
<i>E. delegatensis</i>	7687	11.8	24341	12.6	52120	8.1
<i>E. pauciflora</i> on dolerite	0	0	0	0	370	0.1
<i>E. pauciflora</i> on sediments	883	1.4	1766	0.9	2860	0.4
Furneaux <i>E. nitida</i>	0	0	1638	0.8	4170	0.6
Furneaux <i>E. viminalis</i>	0	0	0	0	0	0
Shrubby <i>E. ovata</i>	0	0	0	0	50	0
<i>E. rodwayi</i>	0	0	0	0	10	0
<i>E. risdonii</i>	0	0	0	0	40	0
<i>E. morrisbyi</i>	0	0	0	0	0	0
Sub-alpine eucalypt forests						
<i>E. coccifera</i> sub-alpine	9124	14.0	18006	9.3	29100	4.5
<i>E. subcrenulata</i> sub-alpine	1047	1.6	1047	0.5	7630	1.2
Wet eucalypt forests						
<i>E. obliqua</i>	841	1.3	9063	4.7	36880	5.7
<i>E. regnans</i>	2510	3.9	2547	1.3	5800	0.9
<i>E. nitida</i>	905	1.4	10809	5.6	50320	7.8
<i>E. delegatensis</i>	12521	19.2	25046	12.9	56420	8.8
<i>E. brookerana</i>	0	0	0	0	50	0
King Island <i>E. globulus</i> - <i>E. brookerana</i> - <i>E. viminalis</i>	0	0	0	0	120	0

Table 5.4 cont.

Forest Community	1937		1970		1992	
	Area (ha)	% of total	Area (ha)	% of total	Area (ha)	% of total
<i>E. viminalis</i>	0	0	0	0	80	0
Non-eucalypt dry forests						
<i>Allocasuarina verticillata</i> forest	256	0.4	287	0.1	430	0.1
<i>Notolea ligustrina</i> and/or <i>Pomaderris apetala</i> closed forest	0	0	0	0	190	0
<i>Callitris rhomboidea</i> forest	0	0	0	0	200	0
<i>Banksia serrata</i> woodland	0	0	0	0	80	0
Non-eucalypt wet forests						
Pencil pine - deciduous beech	141	0.2	282	0.1	360	0.1
Pencil pine	80	0.1	223	0.1	190	0
King Billy pine	939	1.4	1986	1.0	10160	1.6
King Billy pine - deciduous beech	150	0.2	300	0.2	200	0
Huon pine	0	0	294	0.2	6250	1.0
Tall rainforest	3550	5.4	12525	6.5	46040	7.1
Short rainforest	15723	24.0	50419	26.0	156180	24.2
<i>Acacia dealbata</i>	617	0.9	1272	0.7	3990	0.6
<i>A. melanoxylon</i> on flats	0	0	0	0	600	0.1
<i>A. melanoxylon</i> on rises	0	0	0	0	560	0.1
<i>Leptospermum lanigerum</i> - <i>Melaleuca squarrosa</i> swamp forest	77	0.1	2898	1.5	7570	1.2
<i>Melaleuca ericifolia</i> coastal swamp forest	0	0	0	0	190	0
Total	65193	100	193691	100	644300	100

By the end of the late period (1992), 96% of the State's forest communities were represented in reserves (Table 5.4). Two communities remained completely unreserved (*E. morrisbyi* dry eucalypt forest and Furneaux *E. viminalis* dry eucalypt forest). The total statewide forest area reserved increased by over 450 000 ha between 1970 and 1992 (233%), with a 60% increase in the number of communities reserved. While 48 of the 50 forest communities were represented by 1992, the reserved area was again dominated by a small number of communities. Ten communities (21%) comprised 87% of the total area reserved. However, this did broaden from the previous periods to incorporate some low altitude forests, including coastal *E. amygdalina* dry eucalypt forest, *E. obliqua* dry eucalypt forest, *E. obliqua* wet eucalypt forest and tall rainforest. Thus, by 1992 there was both a substantial increase in the total area of forest vegetation reserved and greater

representation of forest communities in reserves, although this remained unbalanced.

Given that forest communities naturally vary in their extent, data pertaining to areas reserved of individual communities, relative to their statewide occurrences, allows an assessment of the adequacy of reservation levels over time. Recent assessments of forest conservation in Tasmania use a 15% level of community representation in secure reserves, calculated from pre-European estimated extents, as the threshold for assessing reservation adequacy.¹² Communities that are reserved at levels below 15% of their pre-European extent are considered inadequately reserved, while those above 15% are considered adequately reserved.

The assessment of forest community data relative to their pre-European estimated and current extents (Table 5.5), shows markedly different patterns to those that emerged from the previous analysis of absolute and relative percentage areas. At the end of the early period (1937), three of the 25 reserved forest communities were adequately represented in secure reserves (using the 15% reservation threshold of pre-European estimated extents). These communities were: *E. tenuiramis* on granite dry eucalypt forest; King Billy pine - deciduous beech wet forest; and *E. coccifera* subalpine eucalypt forest.

This pattern remained stable to the end of the middle period (1970), in spite of there being substantial increases to the absolute areas of a number of the forest communities previously reserved, and a small increase in the total number of forest communities represented in reserves (Table 5.5). By 1970, *E. tenuiramis* on granite dry eucalypt forest, King Billy pine - deciduous beech wet forest and *E. coccifera* subalpine eucalypt forest remained the only forest communities adequately represented in reserves.

Between 1970 and 1992, the pattern changed enormously, reflecting the wider representation of different forest communities in reserves, as well as increases in the extent of those communities previously represented in reserves. By the end of the late period (1992), 16 forest communities were adequately represented in secure reserves, according

to their estimated pre-European statewide extents. This is a significant increase from earlier periods (300%), and includes forest communities occurring in a range of environments, from high to low altitude and coastal to inland areas.

Table 5.5: Cumulative percentage representation of forest communities in reserves, over three historic periods. Data are calculated from current and pre-European estimated areas of forest communities (given in Table 5.1).

Forest Community	% of current statewide area			% of pre-European statewide area		
	1937	1970	1992	1937	1970	1992
Dry eucalypt forests						
Coastal <i>Eucalyptus amygdalina</i>	0.7	0.7	11.1	0.4	0.4	5.6
<i>E. amygdalina</i> on dolerite	0.3	0.5	4.0	0.2	0.3	2.5
<i>E. amygdalina</i> inland	0.0	0.0	3.2	0.0	0.0	1.1
<i>E. amygdalina</i> on sandstone	0.0	0.0	2.8	0.0	0.0	1.4
<i>E. viminalis</i> - <i>E. ovata</i> - <i>E. amygdalina</i> - <i>E. obliqua</i> damp	0.0	0.0	10.2	0.0	0.0	5.1
Grassy <i>E. globulus</i>	8.8	8.8	24.2	5.0	5.0	13.8
<i>E. pulchella</i> - <i>E. globulus</i> - <i>E. viminalis</i> grassy/shrubby forest	0.3	0.4	4.8	0.2	0.3	3.2
<i>E. viminalis</i> grassy	0.2	0.2	0.5	0.1	0.1	0.2
<i>E. viminalis</i> + or - <i>E. globulus</i> coastal	0.0	0.0	20.0	0.0	0.0	3.4
<i>E. tenuiramis</i> on granite	28.1	28.2	43.7	28.1	28.2	43.7
<i>E. tenuiramis</i> on dolerite	0.0	0.0	25.8	0.0	0.0	21.4
Inland <i>E. tenuiramis</i>	0.0	0.3	2.9	0.0	0.1	1.0
<i>E. sieberi</i> on granite	0.0	1.2	3.2	0.0	1.0	2.8
<i>E. sieberi</i> on other substrates	0.0	0.0	6.4	0.0	0.0	4.8
<i>E. obliqua</i>	0.9	1.7	10.5	0.9	0.9	5.9
<i>E. nitida</i>	1.3	12.9	58.9	1.3	7.9	36.1
<i>E. delegatensis</i>	2.6	8.3	17.8	2.2	6.9	14.8
<i>E. pauciflora</i> on dolerite	0.0	0.0	1.9	0.0	0.0	1.4
<i>E. pauciflora</i> on sediments	4.8	9.7	15.6	4.8	4.3	6.9
Furneaux <i>E. nitida</i>	0.0	5.5	14.0	0.0	2.1	5.4
Furneaux <i>E. viminalis</i>	0.0	0.0	0.0	0.0	0.0	0.0
Shrubby <i>E. ovata</i>	0.0	0.0	0.7	0.0	0.0	0.0
<i>E. rodwayi</i>	0.0	0.0	0.1	0.0	0.0	0.1
<i>E. risdonii</i>	0.0	0.0	7.1	0.0	0.0	7.1
<i>E. morrisbyi</i>	0.0	0.0	0.0	0.0	0.0	0.0
Sub-alpine eucalypt forests						
<i>E. coccifera</i> sub-alpine	16.8	33.2	53.6	15.6	30.8	49.8
<i>E. subcrenulata</i> sub-alpine	10.3	10.3	74.8	9.5	9.5	69.4

Table 5.5 cont.

Forest Community	% of current statewide area			% of pre-European statewide area		
	1937	1970	1992	1937	1970	1992
Wet eucalypt forests						
<i>E. obliqua</i>	0.2	2.1	8.7	0.1	1.4	5.6
<i>E. regnans</i>	3.4	3.4	7.8	2.6	2.7	6.1
<i>E. nitida</i>	1.2	14.5	67.6	0.8	9.1	42.5
<i>E. delegatensis</i>	4.4	8.8	19.8	3.5	7.0	15.9
<i>E. brookerana</i> wet	0.0	0.0	1.2	0.0	0.0	0.3
King Island <i>E. globulus</i> - <i>E. brookerana</i> - <i>E. viminalis</i>	0.0	0.0	5.0	0.0	0.0	0.1
<i>E. viminalis</i>	0.0	0.0	2.2	0.0	0.0	0.2
Non-eucalypt dry forests						
<i>Allocasuarina verticillata</i> forest	19.7	22.1	33.1	4.3	4.8	7.2
<i>Notolea ligustrina</i> and/or <i>Pomaderris apetala</i> closed forest	0.0	0.0	65.6	0.0	0.0	44.2
<i>Callitris rhomboidea</i> forest	0.0	0.0	25.3	0.0	0.0	21.5
<i>Banksia serrata</i> woodland	0.0	0.0	100.0	0.0	0.0	100.0
Non-eucalypt wet forests						
Pencil pine - deciduous beech	3.7	7.4	9.4	3.1	6.3	8.0
Pencil pine	3.9	10.9	9.3	1.4	4.0	3.4
King Billy pine	5.2	10.9	55.9	4.7	9.9	50.8
King Billy pine - deciduous beech	19.2	38.5	25.6	18.8	37.5	25.0
Huon pine	0.0	2.8	59.1	0.0	2.2	47.7
Tall rainforest	1.8	6.5	24.0	1.4	5.0	18.3
Short rainforest	4.3	13.7	42.4	3.1	9.9	30.8
<i>Acaciadealbata</i>	1.1	2.4	7.8	1.1	2.3	7.2
<i>A. melanoxylon</i> on flats	0.0	0.0	6.7	0.0	0.0	4.0
<i>A. melanoxylon</i> on rises	0.0	0.0	4.2	0.0	0.0	2.1
<i>Leptospermum lanigerum</i> - <i>Melaleuca squarrosa</i> swamp forest	0.4	15.3	40.1	0.2	8.8	23.0
<i>Melaleuca ericifolia</i> coastal swamp forest	0.0	0.0	31.7	0.0	0.0	0.5
Total	2.0	6.1	20.2	1.2	3.6	12.0

While the additional reserves proclaimed during the late period incorporated a greater area and variety of forest vegetation, by 1992, 34 of the 50 forest communities in the State (68%) remained inadequately reserved. The vast majority of forest communities in reserves during the early and middle periods were inadequately represented, and this trend persisted throughout the century. In both the middle and early periods, well over 50% of forest communities were represented in reserves at less than 1% of their pre-European estimated extents, while

in the late period, 18% were less than 1% represented, and 42% less than 5% represented.

The conservation of forest communities in the State clearly improved in the latter part of the twentieth century. However, by 1992 reservation levels as a whole, and for some individual communities, were neither adequate nor fully representative of the forest diversity occurring in the State, in respect to both current and pre-European settlement times.

The representation of vegetation types in reserves

In this section, the representation of vegetation types in reserves is analysed over the three historic periods. Forest vegetation is included in this analysis, with forest community data grouped into the vegetation types of: dry eucalypt forest/woodland; wet eucalypt forest/woodland; rainforest; and swamp forest. Subalpine eucalypt communities (*E. coccifera* and *E. subcrenulata*) are incorporated in the alpine/subalpine vegetation category.

In 1937, a total of 128 516 ha of vegetation was captured in the reserve system. Alpine/subalpine vegetation comprised 38.2% (49 042 ha) of the total, and was the dominant vegetation type in reserves (Table 5.6). Buttongrass moorland/scrub and rainforest together totalled nearly one third (31.7%) of reserved vegetation, while dry eucalypt and wet eucalypt forests occurred in nearly equal proportions, together comprising over one quarter (26.7%) of reserved vegetation. These five vegetation types overwhelmingly dominated in this early period, and together accounted for over 96% of the total area of vegetation reserved in 1937.

Of the other five vegetation types that occur in the State, only two were reserved in the early period. These both occurred in very small extents, with coastal heathland/scrub comprising 3.4% of the total reserved area, and swamp forest only 0.1%. At this level of resolution, no grasslands, wetlands or saltmarshes were reserved.

Table 5.6: Cumulative representation of vegetation types in reserves over three historic periods.

Vegetation type	1937		1970		1992	
	Area (ha)	% of total	Area (ha)	% of total	Area (ha)	% of total
Dry eucalypt forest/woodland	16968	13.2	56974	13.1	225420	16.6
Wet eucalypt forest	17294	13.5	50119	11.5	161070	11.9
Buttongrass moorland/scrub	21521	16.7	130093	29.8	545329	40.2
Rainforest	19273	15.0	63238	14.5	202410	14.9
Coastal heathland/scrub	4341	3.4	7705	1.8	37268	2.7
Alpine/subalpine	49042	38.2	124863	28.6	175787	12.9
Grassland	0	0	0	0	1201	0.1
Swamp forest	77	0.1	2898	0.7	7760	0.6
Wetland	0	0	0	0	1667	0.1
Saltmarsh	0	0	0	0	270	0
Total	128516	100	435890	100	1358182	100

As in the analysis of forest communities in the previous section, there is a strong bias in the reservation of vegetation in this early period towards those types that occur in high altitude areas. Alpine/subalpine vegetation, by definition, occurs in high altitude areas, while buttongrass moorland/scrub occurs extensively in the mountainous west of the State. Those most poorly reserved vegetation types - coastal heathland/scrub, swamp forest, grasslands, wetlands and saltmarshes, all have largely lower altitude distributions.

This trend persisted through the middle period, with alpine/subalpine vegetation and buttongrass moorland/scrub dominating the 435 890 ha of total reserved vegetation in 1970 (Table 5.6). While the proportion of reserved alpine/subalpine vegetation decreased during the middle period, relative to that of buttongrass moorland/scrub, these remained the dominant vegetation types, together representing just under 60% of total reserved vegetation. The proportion of rainforest and dry eucalypt forest reserved was constant with that of the previous period, while wet eucalypt forest decreased slightly. These three vegetation types together totalled nearly 40% of reserved vegetation, and with alpine/subalpine vegetation and buttongrass moorland/scrub, comprised 97.5% of the total.

As in the early period, coastal heath/scrub and swamp forest were the only other vegetation types reserved, sharing only 2.5% of the total area. No significant areas of grasslands, wetlands or saltmarshes were reserved. The additional reserves proclaimed between 1937 and 1970 thus reinforced the pattern of bias towards high altitude vegetation types.

A massive increase in the representation of vegetation in reserves occurred in the period ending 1992, with a total area of 1 358 182 ha of vegetation reserved (212% greater than that of the previous period). By the end of the late period, all vegetation types were represented in reserves (although some to very limited extent), with significant shifts in the relative percentage areas between vegetation types (Table 5.6).

In 1992, buttongrass moorland/scrub was the dominant vegetation type in the State's reserves, with a 40.2% share of the total area. This was followed by dry eucalypt forests (16.6%), rainforest (14.9%), alpine/subalpine vegetation (12.9%), and wet eucalypt forest (11.9%). These five vegetation types together comprised 96.5% of the total area of vegetation reserved in 1992.

The most significant shifts in relative percentage areas were the decrease in alpine/subalpine vegetation, and the increase in buttongrass moorland/scrub. Alpine/subalpine vegetation steadily decreased over time, from a 38.2% share in the early period to 12.9% in the late period, while buttongrass moorland/scrub increased from 16.7% to 40.2%. During the late period, grassland, wetland and saltmarsh vegetation were for the first time represented in reserves, although only in very limited areas, comprising less than 1% of total reserved vegetation. Coastal heathland/scrub and swamp forests were reserved in similar relative extents to earlier periods, together totalling 3.3%.

While all vegetation types in the State were represented in reserves by the end of the late period, there was still an inequitable distribution in the reservation of vegetation types. This is also apparent when assessing the levels of reservation of vegetation types against both their current and pre-European estimated extents (Table 5.7).

Table 5.7: Cumulative percentage representation of vegetation types in reserves over three historic periods. Data are calculated from current and pre-European estimated areas of vegetation types (given in Table 5.2).

Vegetation type	% of current statewide area			% of pre-European statewide area		
	1937	1970	1992	1937	1970	1992
Dry eucalypt forest/woodland	1.8	3.6	14.3	0.6	2.0	7.8
Wet eucalypt forest	1.8	5.6	16.9	1.1	4.4	10.4
Buttongrass moorland/scrub	1.9	11.4	47.8	1.9	11.3	47.4
Rainforest	3.4	11.3	36.1	2.5	8.3	26.6
Coastal heathland/scrub	1.9	3.4	16.5	1.0	1.8	8.8
Alpine/subalpine	24.2	61.6	86.7	22.7	58.0	81.6
Grassland	0	0	2.6	0	0	1.4
Swamp forest	0.4	14.9	39.8	0.1	7.4	19.9
Wetland	0	0	10.1	0	0	6.8
Saltmarsh	0	0	8.2	0	0	6.8
Total	2.7	9.0	28.7	2.7	9.0	28.7

Using the 15% reservation threshold (of pre-European estimated vegetation areas) as the level for assessing reservation adequacy, alpine/subalpine vegetation was the only vegetation type adequately represented in the reserve system in the early period (22.7%). All other vegetation types were reserved at levels well below the 15% threshold, with no representation of grassland, wetland and saltmarsh vegetation (Figure 5.1).

By 1970, alpine/subalpine vegetation remained the only adequately reserved vegetation type, with 58% of its pre-European estimated area reserved (Figure 5.2). While all other vegetation types were reserved at levels below the 15% threshold, there were some significant improvements in the middle period to reservation levels of some vegetation types: 11.3 % of the pre-European estimated area of buttongrass moorland/scrub was reserved by 1970; 8.3% of rainforest; and 7.4% of swamp forest. Less than 5% of the State's pre-European extents of wet eucalypt forest, dry eucalypt forest and coastal heathland/scrub were reserved, and grasslands, wetlands and saltmarshes remained unreserved.

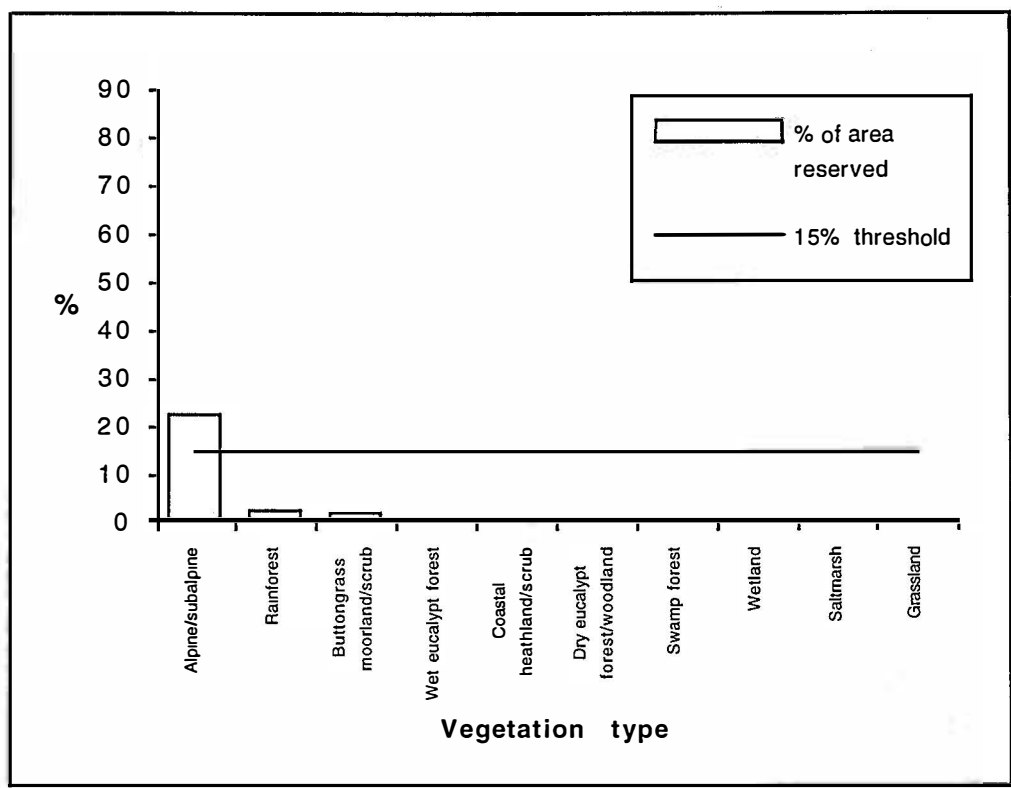


Figure 5.1: Percentage representation of vegetation types in reserves, 1937, in relation to pre-European estimated statewide areas (vegetation types falling above the 15% line are considered adequately reserved and below the line, inadequately reserved).

By 1992, (Figure 5.3) four vegetation types were adequately represented in reserves (alpine/subalpine, buttongrass moorland/scrub, rainforest and swamp forest). This was in accordance with increases in absolute areas of these vegetation types captured in the reserve system during this period (Table 5.6). Although increases were made to the reservation levels of some other vegetation types, over half of the State's vegetation types remained inadequately reserved by 1992 (dry eucalypt forest, wet eucalypt forest, coastal heathland/scrub, grassland, wetland and saltmarsh). Grassland was the most poorly represented, at 1.4% of its pre-European estimated statewide extent reserved.

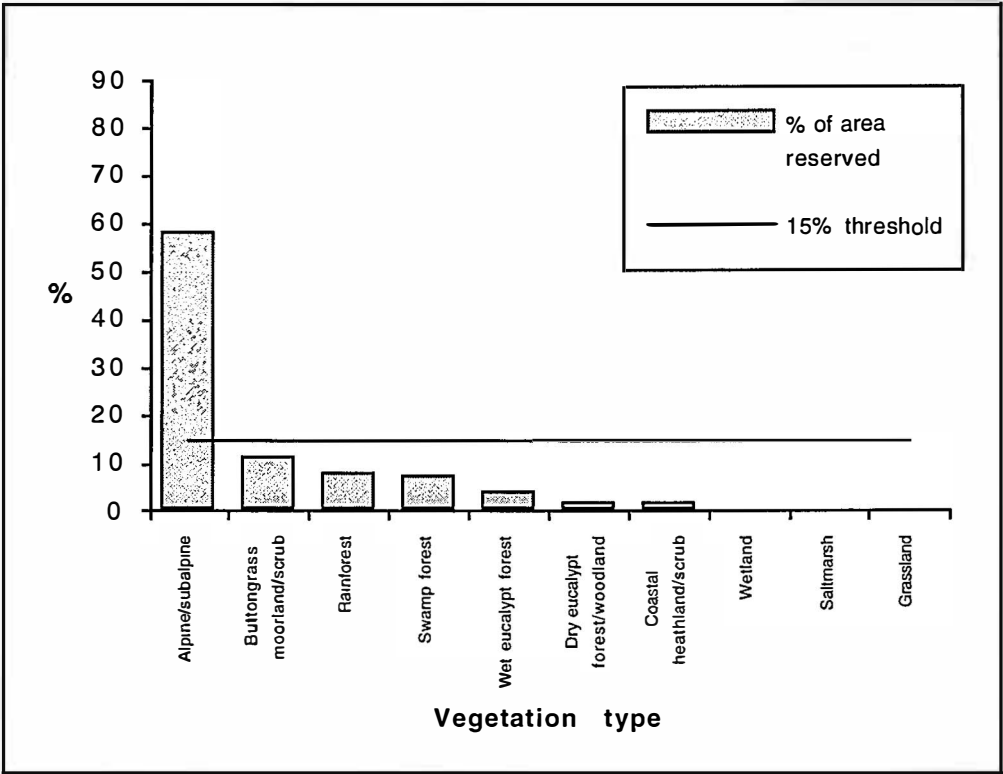


Figure 5.2: Percentage representation of vegetation types in reserves, 1970, in relation to pre-European estimated statewide areas (vegetation types falling above the 15% line are considered adequately reserved and below the line, inadequately reserved).

Proportional representation of vegetation types in reserves

This section examines the proportional representation of vegetation types in reserves across three historic periods, compared with their current statewide extents. The data are presented as relative percentage areas of each vegetation type reserved, calculated from the total in each time period. These are compared with current relative percentage areas of vegetation types across the State (refer to Table 5.3). The data for each historic period are dealt with exclusively, rather than as the cumulative totals used in previous analyses.

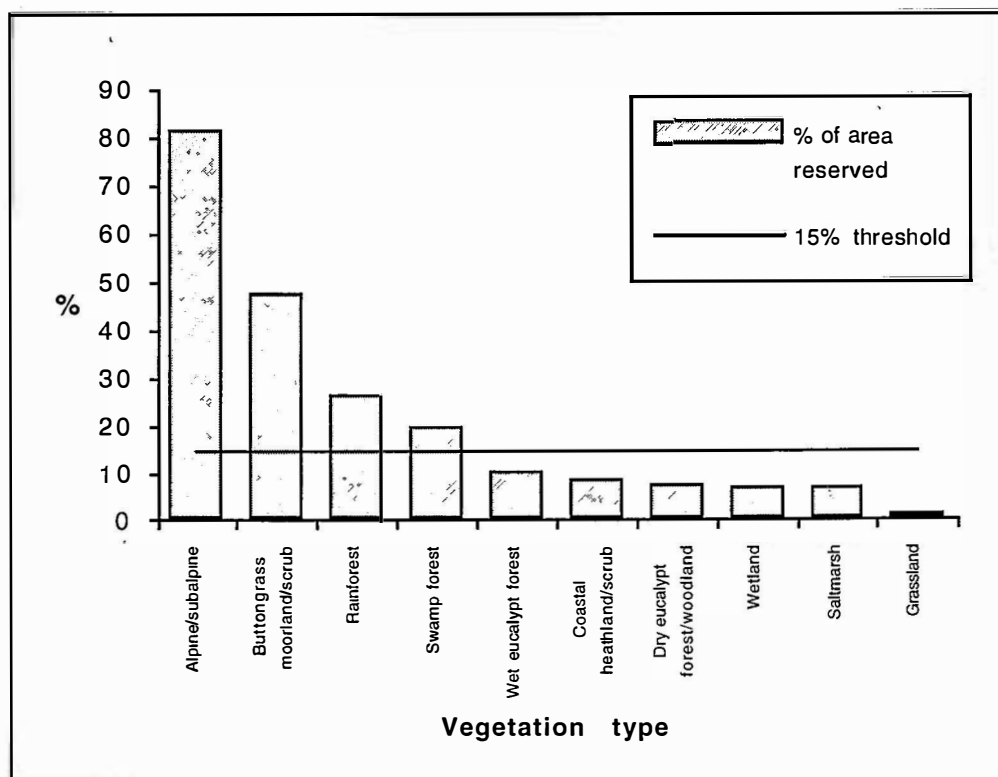


Figure 5.3: Percentage representation of vegetation types in reserves, 1992, in relation to pre-European estimated statewide areas (vegetation types falling above the 15% line are considered adequately reserved and below the line, inadequately reserved).

In the early period, the most striking difference in the relative proportions of vegetation types reserved was in the alpine/subalpine category (Figure 5.4). While the representation in reserves of alpine/subalpine vegetation was close to 40%, it comprised less than 5% of total statewide vegetation. Rainforest was also marginally over-represented by proportion of statewide area (15% of reserved area, and 12% of current statewide vegetation).

All other vegetation types were under-represented. Of those reserved during this period, dry eucalypt forest was the most poorly represented, comprising one third (33.1%) of statewide vegetation, but only 13.2% of that reserved in 1937. Buttongrass moorland/scrub, wet eucalypt forest, coastal heathland/scrub and swamp forest were all under-represented by proportion of statewide area. Grasslands, wetlands and saltmarshes

together comprised only 1.6% of current statewide vegetation, but had 0% representation in early reserves.

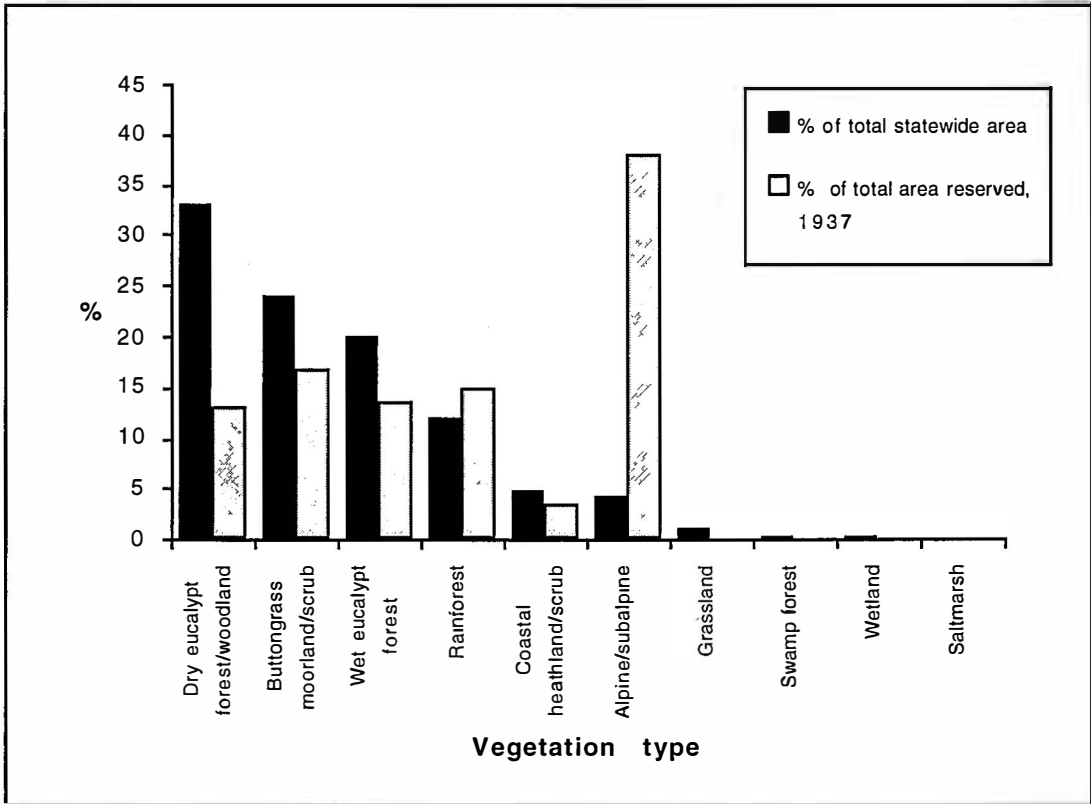


Figure 5.4: Percentage areas of total statewide vegetation versus percentage areas reserved, 1937.

Between 1938 and 1970 (Figure 5.5), alpine/subalpine vegetation continued to be proportionally over-represented by statewide area, although to a lesser degree than in the early period (comprising one quarter 24.7% of reserved vegetation). Rainforest was again over-represented by proportion of statewide area, with the percentage reservation constant with that of the early period. There was a high concentration of buttongrass moorland/scrub in reserves established between 1938-1970. Buttongrass moorland/scrub, accounted for one third of reserved vegetation (34.3%), while its proportion of current statewide vegetation is only 24%. Swamp forest was also marginally over-represented, comprising 0.9% of reserved vegetation, compared with 0.4% of total statewide vegetation.

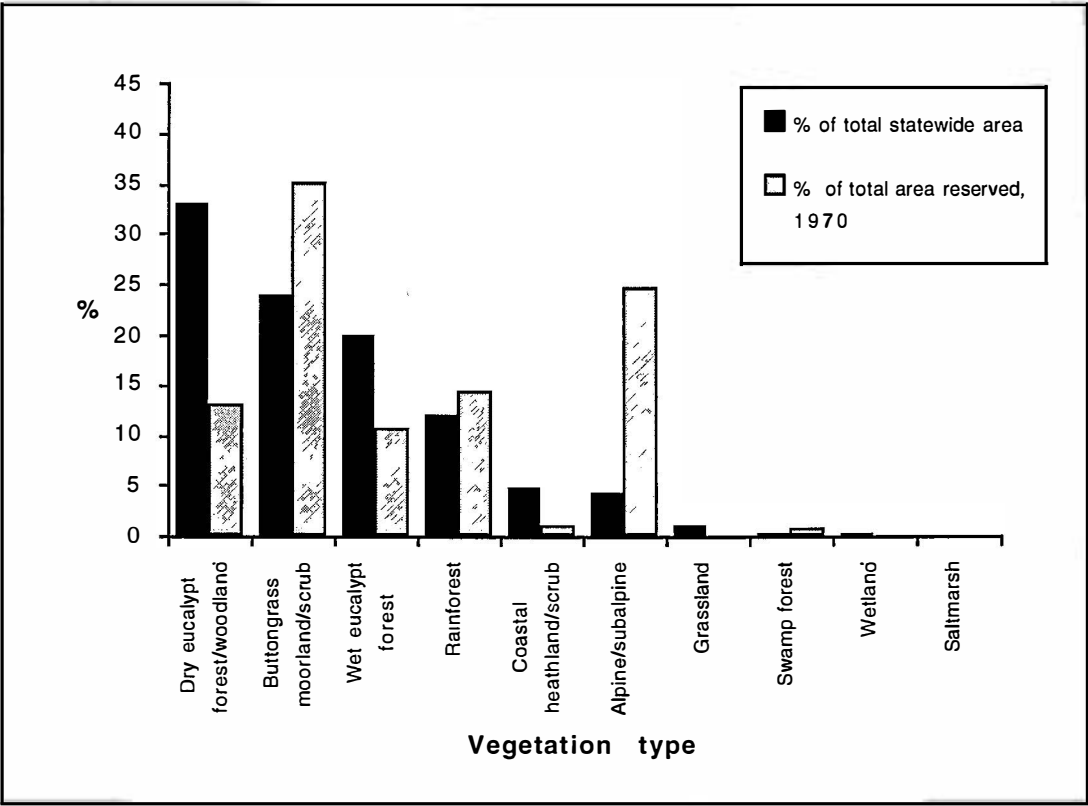


Figure 5.5: Percentage areas of total statewide vegetation versus percentage areas reserved, 1970.

As in the early period, between 1938 and 1970, all other vegetation types were proportionally under-represented in reserves. Dry eucalypt forest/woodland, wet eucalypt forest and coastal heathland/scrub were all reserved at levels well below their proportional statewide areas and grasslands, wetlands and saltmarshes remained at 0% representation.

During the period 1971-1992, the most striking changes from earlier patterns were in the substantial increase in the proportional representation of buttongrass moorland/scrub, and the decrease in the proportional representation of alpine/subalpine vegetation (Figure 5.6). Buttongrass moorland/scrub comprised 45% of total vegetation reserved during this period. Alpine/subalpine vegetation was only marginally over-represented, and the percentage share of this vegetation type in reserves decreased enormously, compared with previous periods.

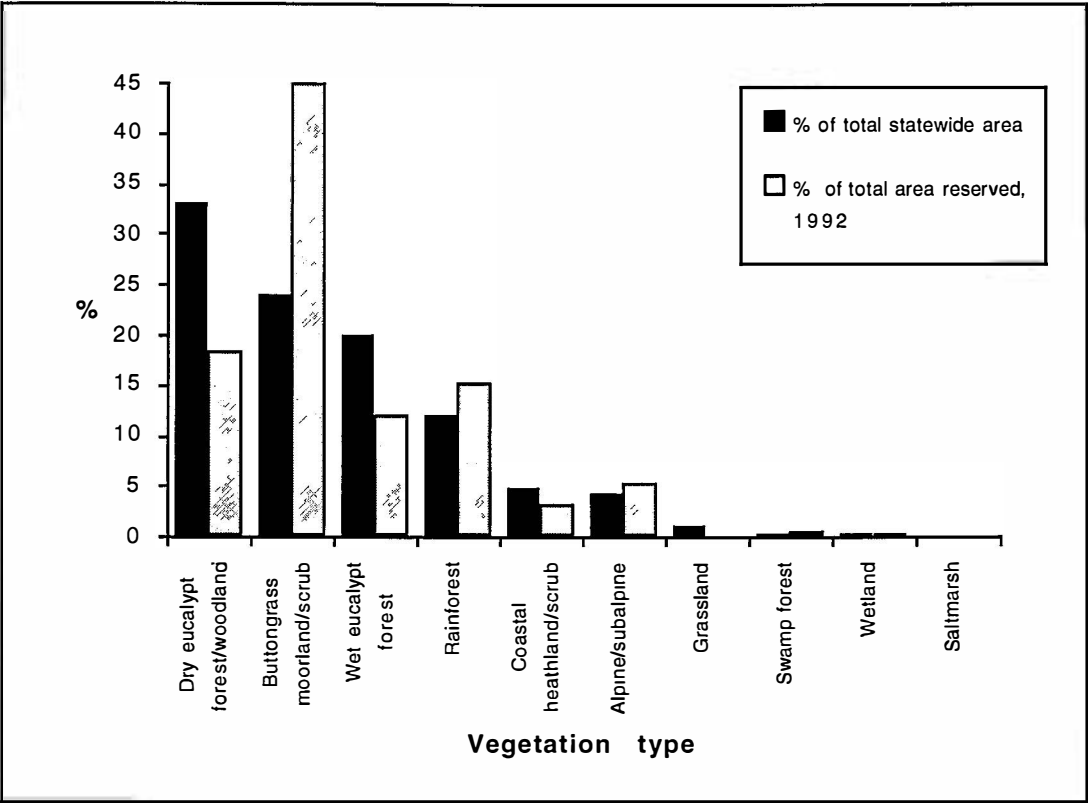


Figure 5.6: Percentage areas of total statewide vegetation versus percentage areas reserved, 1992.

The percentage areas reserved in the later period, comprising dry sclerophyll forest/woodland, wet eucalypt forest, and coastal heathland/scrub were slightly higher than in previous periods, but all were under-represented by proportion of statewide area. The representation of rainforest remained higher than its proportional statewide area. Grasslands comprised 0.1% of the total area reserved during this period (1.1% of current statewide vegetation); wetlands - 0.2% of reserved vegetation (0.4% of statewide vegetation); and saltmarshes 0.01% of reserved vegetation (0.1% of statewide vegetation).

Discussion

National parks and equivalent reserves make a major contribution to the conservation of biodiversity in Tasmania. However, by 1992, six of the State's ten major vegetation types, including 68% of forest

communities, remained inadequately represented in the reserve system.

This unbalanced representation of vegetation in reserves has its roots in the early period of national park development. Initially, the higher altitude areas of the State (and to a lesser degree, coastal areas) were favoured for the establishment of national parks, and the range of vegetation represented in reserves at this time reflects this bias. This trend continued until the 1970s, with the additional areas reserved during the middle period reinforcing the pattern of bias previously established. Alpine vegetation, subalpine forest communities, high altitude rainforest (short rainforest) and buttongrass moor/scrub dominated the vegetation reserved through both the early and middle periods.

In correspondence with this pattern, the vegetation types that have incurred the greatest losses since European settlement are those that are most poorly represented in the reserve system, particularly during these early and middle periods. These include dry eucalypt forest, wet eucalypt forest and grasslands.

The post-1970 period witnessed a great broadening in the reserve system and a corresponding increase in both the diversity and areas of forest communities and vegetation types incorporated in these reserves. While the reserves established post-1970 made significant contributions to increasing the reservation levels of all vegetation types, the established pattern of strong bias persisted to the end of the late period.

The results of this study support similar research conducted in Europe. During the early period of reserve establishment in Sweden (1909-1916), alpine areas dominated, with subalpine birch forest and alpine heaths having the highest degree of representation in protected areas. In the late period (1967-1986), higher proportions of other habitat types were included. The authors suggest that the representation of greater natural variety (biodiversity) in reserves has become an increasingly important conservation issue over time.¹³

The dominance of a small number of high altitude forest communities and vegetation types in reserves proclaimed pre-1970 in Tasmania, suggests an historically stronger focus on other conservation themes, such as the preservation of scenery. This does not preclude the conservation of biodiversity as an historically present motivating force for reserve proposals. However, the representation of a greater variety of forest communities and vegetation types in the State reserve system, post-1970, provides evidence of a shift in emphasis towards the biodiversity conservation theme in the later decades of the twentieth century.

While this Tasmanian study and the Swedish example are in close agreement, the extent to which these findings can be applied elsewhere, is uncertain. When other motives have historically driven the decisions as to where reserves are located (such as recreation, the protection of scenery or specific species conservation), this is likely to lead to biases in the representation of biodiversity in reserves. A variety of such motives, many of which are highly political, have been identified in the history of national park development in countries around the world. For example, in some African nations, nature reserves were first established to protect large game, while in the United States, the wild mountainous areas of the American West were favoured in early reserve selection.¹⁴ Similar findings to those of this study may thus result from research conducted in other countries.

ENDNOTES - CHAPTER 5

1. Cogger, H. G., 1994. Biodiversity conservation in Australia: development of a national strategy. In: Moritz, C. and Kikkawa, T., (Eds.), *Conservation Biology in Australia and Oceania*. Surrey Beatty and Sons Pty Ltd, NSW, 297-304.
- McNeely, J. A., Miller, K. R., Reid, W. V., Mittermeier, R. A. and Werner, T. B., 1990. *Conserving the World's Biological Diversity*. IUCN, WRI, CI, WWF-US, the World Bank, Gland Switzerland and Washington DC.
- Wilson, E. O., (Ed.), 1988. *Biodiversity*. National Academy Press, Washington, DC.
- World Resources Institute (WRI), The World Conservation Union (IUCN) and United Nations Environment Programme (UNEP) in consultation with FAO and UNESCO, 1992. *Global Biodiversity Strategy*. WRI, IUCN, UNEP.
2. Hawksworth, D. L., (Ed.), 1995. *Biodiversity. Measurement and Estimation*. The Royal Society and Chapman and Hall.
- Mc Neely *et. al.*, 1990, *op. cit.*
- Solbridge, O. T., vanEmden, H. M. and van Oordt, P. G. W. J., 1994. *Biodiversity and Global Change*. CAB International and IUBS, UK.
3. For example, Coy, R., Greenslade, P. and Rounsevell, D., 1993. A survey of invertebrates in Tasmanian rainforest. *Tasmanian NRCP Technical Report No. 9*. Parks and Wildlife Service, Tasmania, and Department of Arts, Sport, the Environment and Territories, Canberra.
- Michaels, K. and Mendel, L., 1998. Carabid beetle and vegetation associations in the Tasmanian Eastern Tiers: implications for conservation. *Pacific Conservation Biology*, 4 (3), 240-249.
4. Harris, S. and Whinam, J., 1994. Fenced all around - perspectives on the development of nature conservation in Tasmania. In: Moritz, C. and Kikkawa, J., *Conservation in Australia and Oceania*. Surrey Beatty and Sons Pty Ltd, NSW, 327-335.
- Mosley, J. G., 1969. Scenic reserve and fauna sanctuary systems in Tasmania. In: Webb, L. J., Whitelock, D. and LeGay, J., (Eds.), *The Last of Lands*. Jacaranda Press, 161-169.
- Specht, R. L., Roe, E. M. and Broughton, V. H., 1974. Conservation of major plant communities in Australia and Papua New Guinea. *Australian Journal of Botany*. Supplementary Series, No. 7.
5. Harris and Whinam, 1994, *op. cit.*
- Specht *et. al.*, 1974, *op. cit.*
6. Kirkpatrick, J. B. and Dickinson, K. L. M., 1984. Map: *Vegetation of Tasmania*. Forestry Commission Tasmania.

7. Tasmania-Commonwealth Regional Forest Agreement, 1996. Maps: *Tasmania Comprehensive Regional Assessment. Forest Communities - Current Extent*. Tasmanian Public Land Use Commission.
8. Kirkpatrick and Dickinson, 1984, *op. cit.*
9. Kirkpatrick, J. B., Barker, P., Brown, M. J., Harris, S. and Mackie, R., 1995. The reservation status of Tasmanian vascular plant communities. *Wildlife Scientific Report* 95/4. Parks and Wildlife Service, Tasmania.
- Tasmania-Commonwealth Regional Forest Agreement, 1996. *Environment and Heritage Report Vol. 1*. Tasmanian Public Land Use Commission.
10. Tasmania-Commonwealth Regional Forest Agreement, 1996. *Background Report Part A*. Tasmanian Public Land Use Commission.
11. Fensham, R. J., 1989. The pre-European vegetation of the Midlands, Tasmania: a floristic and historical analysis of vegetation patterns. *Journal of Biogeography*, 16, 29-45.
- Fensham, R. J. and Kirkpatrick, J. B., 1989. The conservation of original vegetation remnants in the Midlands, Tasmania. *Papers and Proceedings of the Royal Society of Tasmania*, 123, 229-246.
12. Tasmanian-Commonwealth Regional Forest Agreement, 1996, *op. cit.* (Background Report Part A).
13. Gotmark, F. and Nilsson, C., 1992. Criteria used for protection of natural areas in Sweden 1909-1986. *Conservation Biology*, 6 (2), 220-231.
- Nilsson, C. and Gotmark, F., 1992. Protected areas in Sweden: is natural variety adequately represented? *Conservation Biology*, 6 (2), 232-242.
14. Hall, C. M. and Shultis, J., 1991. Railways, tourism and worthless lands: the establishment of national parks in Australia, Canada, New Zealand and the United States. *Australian Canadian Studies*, 8 (2), 57-74.
- Peluso, N. L., 1993. Coercing conservation? The politics of state resource control. *Global Environmental Change*, 3 (2), 199-217.
- Runte, A., 1979. *National Parks: The American Experience*. Lincoln: The University of Nebraska Press.

CHAPTER 6

Scenery

Introduction

One of the major conservation roles of national parks is to preserve landscapes of outstanding natural aesthetic significance. This chapter examines the representation of scenery within Tasmanian national parks and equivalent reserves over three historic periods.¹ The specific aims of this investigation are:

- develop a method of scenic evaluation that can be applied across the century;
- determine the representation of scenery in reserves proclaimed during the three historic time-slices of 1916-1937, 1938-1970 and 1971-1992;
- assess whether the relative significance of scenery conservation in reserves has shifted in emphasis over time;
- provide data to determine the relative significance of scenery conservation in relation to that of biodiversity (Chapter 5) and wilderness (Chapter 7) conservation over time.

The dominant global culture regards natural aesthetic significance highly, as evidenced by its presence in the criteria for listing of natural areas as world heritage, the concentration of naturally scenically attractive areas within reserve systems, and the widespread representation of scenery in art and literature.² However, as a physical attribute, scenery is difficult to define and evaluate. The perception of what constitutes good scenery may vary between individuals, societies, places and times.

While there are no universally accepted procedures for the assessment of scenery, there has been considerable research effort directed towards identifying the attributes of visually attractive landscapes and some research effort directed towards mapping different classes of scenic quality.³ Landscape preference theories, largely derived from perception studies using direct participant surveys, have shown high correlations in responses among different observers to landscape types and scenic attributes.⁴

The scenic attributes identified in the literature as consistently contributing to high quality scenery of natural areas are: high relative relief/topographic ruggedness; the presence of water; vegetation diversity and visual complexity.⁵ Although only limited research has involved cross-cultural studies, there is some evidence to suggest that there are similarities in landscape preferences between cultures.⁶ However, this idea is yet to be fully explored, with some suggesting that the search for a universal set of landscape preferences will prove fruitless.⁷ Nevertheless, even if it is accepted that scenic quality is culturally contingent, a quantification of this resource could be valid in relation to the culture to which it pertains.

This chapter is partly devoted to determining popular scenic preferences for Tasmanian landscapes and whether these have changed over time. The use of direct survey methods, including participants preferentially rating photographs, slides and videoscapes of different scenes to gauge scenic preferences, is a technique that is not available historically. However, published photographic depictions of natural scenery can provide evidence of the relative importance of scenic elements in the natural aesthetic resource in historic times.

In this study, pictorial content analysis is used for the purpose of determining whether natural scenic preferences in Tasmania have changed since the early period of national park development. The results of these analyses, together with those of established landscape theory, are used to develop a scoring system for natural aesthetic quality. This is used to determine the representation of the natural aesthetic resource and its elements in the reserve system over the three major periods of its development.

Pictorial Content Analysis

Introduction

Popular preference for types of natural scenery can be gleaned through tourist pamphlets, brochures, general books and published material portraying natural scenes. Such material is produced for a wide audience, with the aim of attracting people through representations of features to which they are most likely to be drawn. Thus, it can reasonably be assumed that the scenes presented in these sources, and the particular elements that comprise these scenes, are commonly regarded as attractive or high quality scenery.

Methods

Content analysis was undertaken on 392 photographs of Tasmanian natural scenes from 63 separate sources, with 97 being for the period 1916-1937, 119 for the period 1938-1970 and 176 for the period 1971-1992.⁸ This involved scoring each of the photographs for the scenic features they were representing. As this study is at the statewide scale, only those broad landscape features represented in pictures were scored. The elements recorded as being present or absent in each photograph were: mountains, lakes, the sea, waterfalls, caves. High relative relief and the presence of water have been established as major positive influences in the perception of scenery, and caves are noted scenic attractions.⁹ Almost all other natural elements represented in these sources were small scale features, such as riverscapes and fern glens. Given the scale of these features and their almost ubiquitous occurrence across the State, it was neither practical, nor appropriate, to include them in this analysis.

Interpretation of landscape features was largely based on captions or text accompanying pictorial representations. Where this was not given, mountains were interpreted as large scale topographic features where the whole or larger part of a mountain, mountain range or alpine peaks were represented. Where the scale of the feature appeared small, such

as low hills, was not obvious, or where only a small portion was represented, such as a cliff, it was not recorded.

Tasmania is by Australian standards, a relatively mountainous State, where past glacial activity has had a considerable influence on shaping landforms. Lakes are a common landscape feature, with numerous cirque lakes occurring in highland areas. While the waterforms of lakes and the sea were scored, rivers were not as they tended to be featured at the small scale and as Tasmania has a high drainage density, their ultimate inclusion in the a large scale scenic evaluation would prove redundant. The specific features of waterfalls and caves were scored as they are scenic attractions that appeared frequently in pictorial representations of natural areas and have historically been the focal points for the establishment of conservation reserves (refer to Part 1 of this thesis).

The scenic attributes were scored individually each time they were present in a photograph. If there was more than one scenic element represented, such as a lake, mountains and the coast, each element was scored individually. If a particular feature or scene was repeated at different times in different sources, such as Cradle Mountain or the Freycinet Peninsula, then presumably these have remained aesthetically popular across the century, and as such, were scored each time they appeared.

Some typical representations of Tasmanian scenery from the early period (1916-1937) are shown in Plates 6.1-6.4. The photographs are by John Watt Beattie, whose work appeared in numerous tourist brochures of the time, and who was professionally and personally active in promoting the State's tourist attractions (refer to Chapter 2). Plates 6.5-6.7 are representations of scenery from publications of the period, 1938-1970. Interesting to note are the commentaries that accompanied these photographs, which are shrouded in romantic overtones. The scenes in Plates 6.8-6.10 are Tasmanian natural landscapes portrayed in published sources since 1971, in which can be noted the similarities between this and previous periods.

Data were collected for each period until the relative proportions of elements stabilized, or no more material could be located from archives and libraries. The data were summed to arrive at total scores for each scenic attribute in each period. Relative weightings for scenic attributes were then created by converting these scores to ratios.

Results

There was consistency in the ratios between all time periods (Table 6.1), with no significant differentiation (Chi-square = 9.9, d.f. = 8, $P > 0.05$). Mountains (high relative relief) are the most featured scenic attribute in popular pictorial representations of Tasmanian natural landscapes, and have been so for the entire century. They tend to be represented as scenic features around twice as frequently as lakes and coastlines.

Table 6.1: Representation of natural scenic elements in photographs of natural areas published in three historic periods in Tasmania.

Mo = mountains, La = lakes, Co = coast, Wa = waterfalls, Ca = caves

1916-1937

	Mo	La	Co	Wa	Ca
Total	49	28	28	17	6
Ratio	8.2	: 4.7	: 4.7	: 2.8	: 1

1938-1970

	Mo	La	Co	Wa	Ca
Total	83	43	45	21	8
Ratio	10.4	: 5.4	: 5.6	: 2.6	: 1

1971-1992

	Mo	La	Co	Wa	Ca
Total	122	57	54	14	7
Ratio	17.4	: 8.2	: 7.8	: 2.5	: 1

Summed scores

(1916-1992)	Mo	La	Co	Wa	Ca
Total	254	128	127	53	21
Ratio	12.1	: 6.1	: 6.1	: 2.5	: 1

The values for waterform, represented by lakes and coastline are not only consistent over time, relative to other scenic features, but also virtually equal to each other. Both lakes and coastline appear approximately half as frequently as high relative relief, over twice as frequently as the specific scenic feature of waterfalls and six times more than caves. The scenic attributes of waterfalls and caves featured in a number of photographs over all time periods, but appear to be of lesser scenic value than the larger landscape features of mountains, lakes and coastline.

A final ratio was calculated from the summed data across all time periods (Table 6.1). This was used as the basis for assigning relative weights for each of the scenic attributes scored in the scenic evaluation.



Plate 6.1: Mt Gould and Lake Marion, central Tasmania. Photographer: John Watt Beattie. Source: The Beattie Studio (private collection).

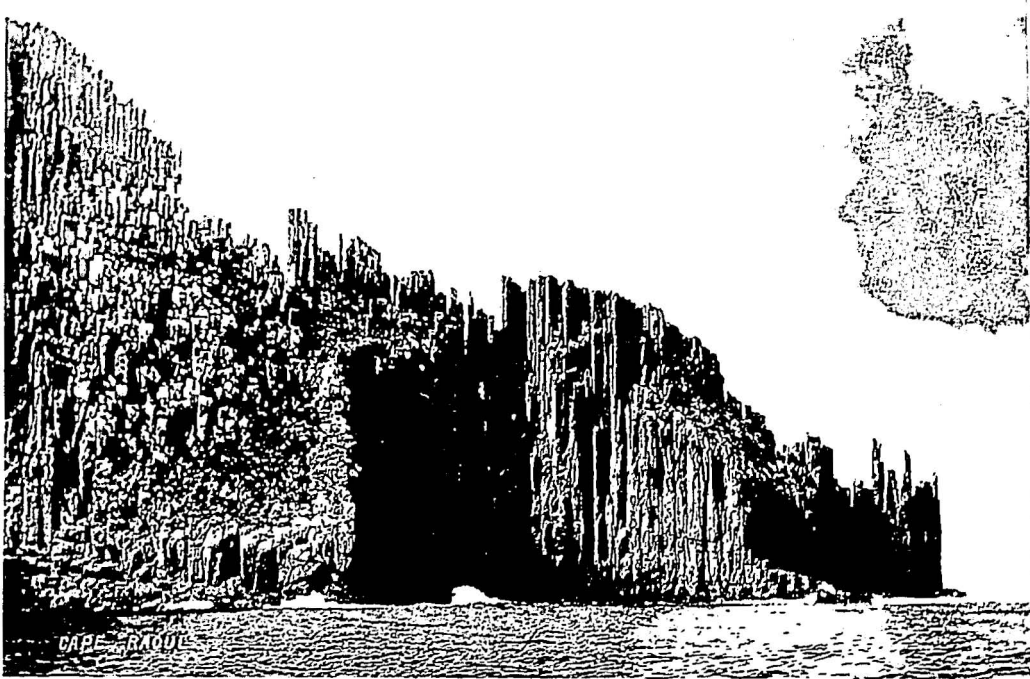


Plate 6.2: Cape Raoul, Tasman Peninsula, southeast Tasmania.

Photographer: John Watt Beattie. Source: The Beattie Studio (private collection).



Plate 6.3: Port Davey, west coast. Photographer: John Watt Beattie. Source: The Beattie Studio (private collection).



Plate 6.4: St Columba Falls, South George River, northeast Tasmania.

Photographer: John Watt Beattie. Source: The Beattie Studio (private collection).



Plate 6.5: Cradle Mountain. "Cradle Mountain - Lake St Clair National Park...mirrors the most impressive mountain and lake scenery in the whole of the Australian Commonwealth." Photographer: Frank Hurley. Source: Hurley, F., 1953. *Tasmanian: A Glance at its History, Beauty, Resources and Development Over a Period of 150 Years*. John Sands Pty Ltd, Sydney, p94. Reproduced with kind permission of John Sands, Sydney.



Plate 6.6: Russell Falls, Mt Field National Park. "Russell Falls and its fairy-like setting takes pride of place among Tasmania's many waterfalls. It is a cascade of happy moods, but never so merry as when the winds whirl up its sprays and the sunbeams stream down through wet, sparkling trees." Photographer: Frank Hurley. Source: Hurley, F., 1953. *Tasmanian: A Glance at its History, Beauty, Resources and Development Over a Period of 150 Years*. John Sands Pty Ltd, Sydney, p19. Reproduced with kind permission of John Sands, Sydney.



Plate 6.7: Frenchmans Cap, west coast. "...an isolated mass of gleaming white quartzite, rising sheerly from the waters of lovely Lake Tahune like a mighty cathedral spire". Photographer: Frank Hurley. Source: Hurley, F., 1953. *Tasmanian: A Glance at its History, Beauty, Resources and Development Over a Period of 150 Years*. John Sands Pty Ltd, Sydney, p63. Reproduced with kind permission of John Sands, Sydney.



Plate 6.8: Mount Gould and Lake Elysia, the Labyrinth, Du Cane Range, central Tasmania. Photographer: Peter Dombrovskis. Reproduced with kind permission of West Wind Press, Sandy Bay, Tasmania.



Plate 6.9: East face of Cradle Mountain. Photographer: Peter Dombrovskis. Reproduced with kind permission of West Wind Press, Sandy Bay, Tasmania.



Plate 6.10: New Harbour Beach, southwest Tasmania. Photographer: Peter Dombrovskis. Reproduced with kind permission of West Wind Press, Sandy Bay, Tasmania.

Scenic Attributes and Scenic Evaluation

Introduction

This investigation is not concerned with specific views or views from different viewpoints, but rather with the opportunity for viewing high quality scenery. An area that scores highly on its scenic attributes in this study offers many opportunities for the viewing of attractive scenes. Conversely if an area does not score well on the presence of scenic attributes, the opportunity of viewing high quality scenery is reduced. Current theories of scenic preference and the results of the pictorial content analysis comprised the basis for selecting the scenic attributes used in this study.

Methods

Scenic attribute data were extracted for the cells in the 10 km x 10 km Australian National Mapping Grid. This sample unit provides a consistent and readily interpreted area, at an appropriate statewide scale. The 10 km x 10 km map grid is widely used in the State as a base for data collation and interpretation.¹⁰

Data were collected for the following scenic attributes:

- *relative relief* - calculated from 100 m contours on 1:250 000 topographic map sheets as the lowest height of the highest altitude class minus the lowest height of the lowest altitude class
- *waterform*
 - a) *lakes* - presence or absence of lakes; number of lakes; and area of lakes (1:250 000 topographic map sheets)
 - b) *sea* - presence or absence of coastline (1:250 000)
- *vegetation diversity* - the number of different mapped plant communities occurring within each grid square.¹¹
- *specific scenic features*
 - a) *waterfalls* - presence or absence of waterfalls
 - b) *caves* - presence or absence of caves

Data on both waterfalls and caves were extracted from a Tasmanian Nomenclature database, at the topographic map scale of 1:25 000.¹²

Relative relief was used as a topographic indicator, rather than absolute relief, as it provides a measure of change in height over an area. A grid square may be of high absolute relief, but have little change in altitude over its area, such as that encompassing an alpine plateau. According to established landscape preferences and the pictorial content analysis in this study, landscapes that have variations in altitude and topographic ruggedness, are preferable to landscapes of little change of relief.

Lakes were recorded in the form of presence/absence, number and area. Although lakes commonly appeared as scenic features in popular representations of Tasmanian natural landscapes, it was not possible to ascertain weightings for lake areas or lake densities from the pictorial content analysis. This posed a number of questions, which are not adequately addressed in the literature such as, is a small number of large lakes preferable to a large number of small lakes in a scene, or vice versa? Lake presence/absence data was thus used in the scenic analysis, and is consistent with that used for the other waterform (the sea), recorded through presence/absence of coastline.

Although not generally at the broad landscape scale, the specific scenic features of waterfalls and caves were included in the analysis as they are noted scenic attractions and were consistently represented in photographs across all time periods. Waterfalls and caves have been the focal points for a number of reserves established in Tasmania.

The only one of the variables that was not assessed in the pictorial content analysis was vegetation diversity. High vegetation diversity contributes to heterogeneity in the landscape, which according to established landscape theories, is preferable over homogeneity, but proved difficult to measure on the landscape photographs.¹³

The scenic scoring was undertaken for a total of 688 (10 km x 10 km) grid squares. Approximately half of these comprised the reserved portion of the Tasmanian natural scenic estate: 1937 - 37 reserved grid squares; 1970 - 114 reserved grid squares; 1992 - 349 reserved grid squares. The unreserved portion of the natural scenic estate comprised

339 grid squares. Only those 10 km x 10 km grid squares with greater than 50% native vegetation (<50% cleared land), were included in the analysis (calculated using a 1992 map base). Nine reserved grid squares with greater than 50% cleared land were excluded from the analysis to ensure consistency. At the broad landscape scale of analysis used in this study, in those grid squares with greater than 50% uncleared land, there is the opportunity of viewing substantial tracts of natural scenery, uninterrupted by gross human modifications, although this may vary according to the topography of an area.

Scenic analysis trials

Six trials were run on the scenic attribute database to test whether different weightings of vegetation diversity affected relative scores, and to test the sensitivity of the database to the resolution of recorded data.

Relative relief data ranged from 0 m to 1300 m, representing 14 classes. Only one grid square occurred in the top class (1300 m) and was merged into the adjacent 1200 m class. The method used to determine relative relief (lowest value of the highest altitude class minus the lowest value of the lowest altitude class), and the scale at which this was calculated (100 m contour intervals), meant that the 0 m class was not representative of reality. That is, there were changes in relief over these 10 km x 10 km grid squares that were not captured. This class was thus merged with the 100 m class, and as they represent the lowest relative relief, this was unlikely to have any significant impact on scenic ratings. The result of these minor changes to relative relief values was to create 12 classes.

The relative relief rating calculated from the pictorial content analysis was 12.1, which represented mountains, or high relative relief. However, relative relief recorded for each grid square represents a range of values, from high to low. As such, the weighting of 12.1 was converted to a range that corresponds to a scale from high to low relative relief. The raw values in each class were divided by 1200, then multiplied by the weighting of 12.1. This essentially means that those with a higher rating than 6 (above what could be considered moderate relative relief), would still rate higher than lakes and coastline, which

both weight at 6.1. Those in the lower range of values would rate lower than both lakes and coastline.

Lakes and coastline were recorded for each grid square in the form of presence/absence data, and a weighting of 6.1 was derived from the pictorial content analysis. Presence data was thus scored as 6.1 for each grid square, and absence data was scored as 0.

Waterfalls and caves were both recorded as being either present or absent in a grid square. Presence values for waterfalls were weighted as 2.5 (absence values, 0) and presence values for caves weighted as 1 (absence values, 0).

Vegetation diversity raw values were recorded as the number of different plant communities occurring within a grid square, and ranged from 1-11. One grid square was represented in the top class (11), and was thus merged with the adjacent class of value 10. Three trials were run on the data to determine the effects of different weightings of vegetation diversity on grid square scores:

- 1) $(Rr/1200 \times 12.1) + (La \times 6.1) + (Co \times 6.1) + (Wa \times 2.5) + (Ca) + (Vd/10 \times 1)$
- 2) $(Rr/1200 \times 12.1) + (La \times 6.1) + (Co \times 6.1) + (Wa \times 2.5) + (Ca) + (Vd/10 \times 2.5)$
- 3) $(Rr/1200 \times 12.1) + (La \times 6.1) + (Co \times 6.1) + (Wa \times 2.5) + (Ca) + (Vd/10 \times 6.1)$

where,	Rr =	the raw value for relative relief	
	La =	"	lakes
	Co =	"	coastline
	Wa =	"	waterfalls
	Ca =	"	caves
	Vd =	"	vegetation diversity

Further sensitivity tests were run on the data set, with relative relief values converted to 6 classes, each of 200 m. This alternative was run three times, with vegetation diversity scoring 1, 2.5 and 6.1 in each different analysis, as in the above three equations.

Individual natural scenic scores for each grid cell were calculated under the above six trials. The data were then divided into seven classes of equal size, representing a range of relative scenic values, from high to low. Although class sizes were determined so as to be equal, they vary slightly, as a result of the class interval falling between cells of equal value. If the majority of these scores fell above the class interval, they were all placed into the class above. Conversely, if the majority of these scores fell below the class interval, they were placed into the class below.

One third of the data set falling in national parks and equivalent reserves (114 cells), comprising those grid squares reserved in the early and middle periods (1916-1970), was sampled to determine the effects of the six different combinations of vegetation diversity and relative relief weightings on the scenic scores. The numbers of grid squares falling into each of the seven scenic classes were determined under each trial, which produced frequency distribution data. The chi-square test was applied to the data to test the hypothesis (H_0) that there is no significant difference in the scenic scores produced from each of the six analyses. This test supported the null hypothesis (chi-square = 5.33, d.f. = 30, $P > 0.05$). The formula selected for further analysis weighted vegetation diversity at 2.5, and used relative relief classes of 100 m.

Results

Scenic attribute data and scenic scores

Between 1937 and 1992 the Tasmanian natural scenic value captured in secure reserves increased from 7.8% to 51.7% of the 1992 total scenic estate (summed reserved and unreserved grid square data), with more than half of this increase occurring between 1970 and 1992 (Table 6.2). By 1992, 70% of grid squares with caves and waterfalls were in reserves, and more than half of the scores related to mountains, lakes and vegetation diversity were attributable to reserved grid squares (Table 6.2). Only coasts had less than half of their statewide score within reserves.

Table 6.2: Cumulative reservation of scenic attributes over three historic periods, expressed as absolute scores and percentages of the 1992 totals of the Tasmanian natural scenic estate.

Scenic attribute	1937		1970		1992		Total 1992*
	Score	%	Score	%	Score	%	
Relative relief	260.8	8.6	747.8	24.6	1799.3	59.3	3032.0
Lakes	128.1	9.4	317.2	23.3	786.9	57.9	1359.9
Coastline	36.6	2.5	158.6	11.0	707.6	48.9	1445.6
Waterfalls	40.0	15.1	80.0	30.2	177.5	70.0	265.0
Caves	6.0	15.0	14.0	35.0	28.0	70.0	40.0
Veg. diversity	65.2	8.9	159.9	21.8	417.9	57.0	733.2
Total	536.7	7.8	1477.5	21.4	3917.2	57.0	6875.7

* Total value for combined reserved and unreserved grid squares

The total and mean natural scenic scores for reserved grid squares steadily declined between 1937 and 1992 (Table 6.3), as did those for all scenic elements, except the coast. However, with the exception of coasts, total scores, and scores for all elements, had higher grid square means in 1992 inside reserves than outside reserves (Table 6.4, Figure 6.1).

Table 6.3: Mean grid square scores of scenic attributes in national parks and equivalent reserves over three historic periods.

Scenic attribute	1916-1937	1938-1970	1971-1992	Max. value	Min. value
Relative relief	7.0	6.3	4.5	12.1	1.0
Lakes	3.5	2.5	2.0	6.1	0
Coastline	1.0	1.6	2.3	6.1	0
Waterfalls	1.1	0.5	0.4	2.5	0
Caves	0.2	0.1	0.1	1.0	0
Veg. diversity	1.8	1.3	1.1	2.5	0.3
Total score	14.6	12.3	10.4	22.9	1.3

Table 6.4: Summed scores and mean grid square scores of scenic attributes for reserved and unreserved components of the Tasmanian natural scenic estate, 1992.

Scenic attribute	Reserved Area		Unreserved Area	
	Summed score	Mean per grid square	Summed score	Mean per grid square
Relative relief	1799.3	5.2	1232.7	3.6
Lakes	786.9	2.3	573.0	1.7
Coastline	707.6	2.0	738.0	2.2
Waterfalls	177.5	0.5	87.5	0.3
Caves	28.0	0.1	12.0	0.0
Veg. diversity	417.9	1.2	315.3	0.1
Total scenic score	3917.2	11.2	2958.5	8.7

While there were large increases in the representation of all scenic attributes in secure reserves over time, not all of these were not commensurate with the rates of increase in total area of the State reserved. Between 1937 and 1970, the rates of increase of coastline and relative relief were above the rate of increase of numbers of grid squares in secure reserves (208%) - Table 6.5. In the period 1971-1992, all rates of increase, except coastline were well below the rate of increase in numbers of reserved grid squares (205%).

Table 6.5: Proportional increase in the representation of scenic attributes in reserves over time.

Scenic attribute	Increase 1937-1970		Increase 1970-1992	
	Score	%	Score	%
Relative relief	487.0	187	1051.5	140
Lakes	189.1	148	469.7	148
Coastline	122.0	333	549.0	346
Waterfalls	40.0	100	97.5	122
Caves	8.0	133	14.0	100
Veg. diversity	94.7	145	258.0	161
Total	940.8	175	2439.7	165

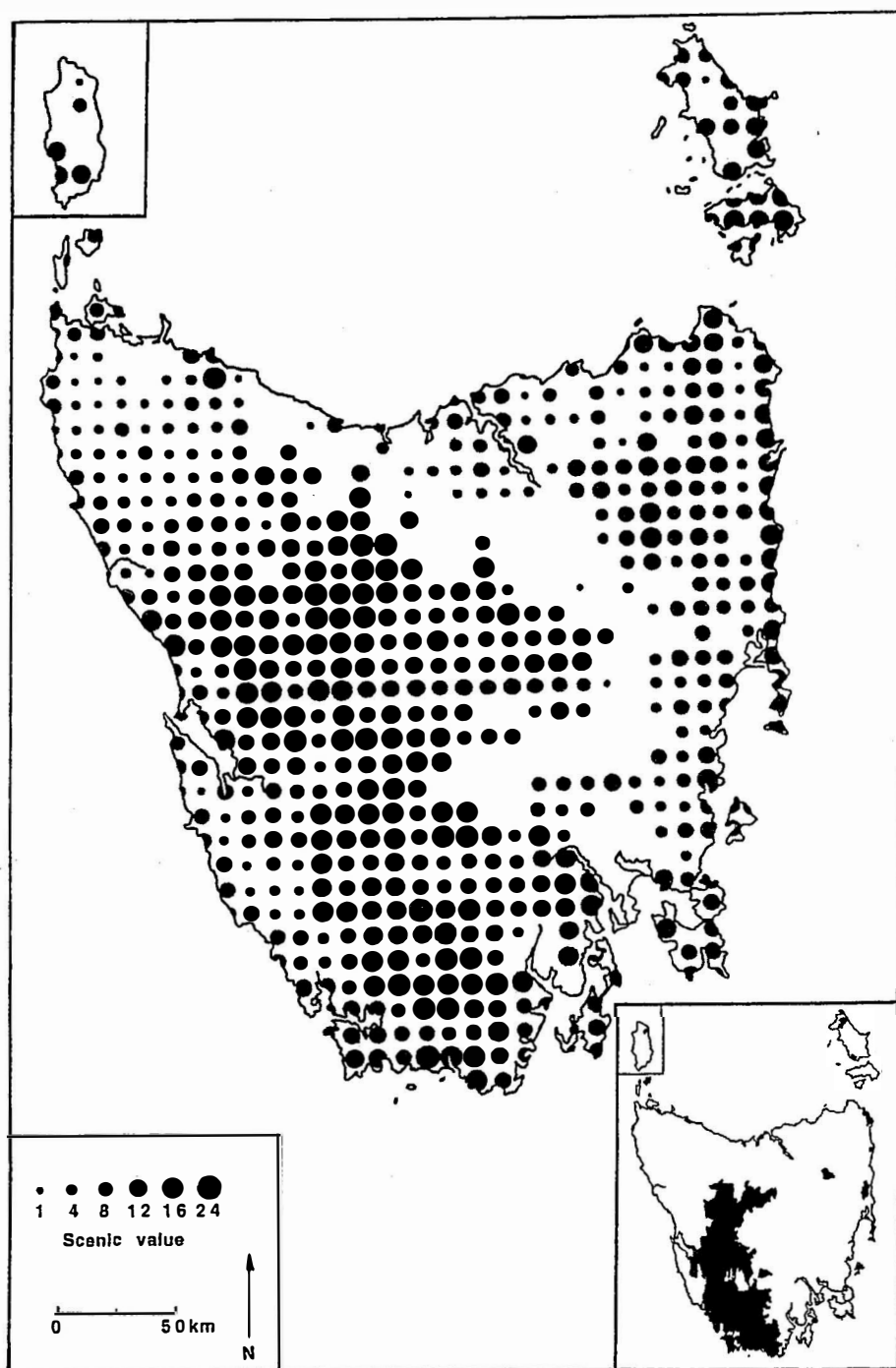


Figure 6.1: Natural scenic value in Tasmania (insert shows 1992 secure reserve boundaries).

Scenic analysis across three historic periods

This analysis is based on scenic values calculated for each 10 km x 10 km grid square completely or partially reserved as a national park or equivalent reserve, using the methods discussed in section 6.3. The scenic values for each grid square were divided into seven almost equal classes, which were assigned scores from 1-7, corresponding to a range of relative scenic values, with class 1 representing high scenic value and class 7, low scenic value. The frequencies of 10 km x 10 km grid squares falling into each of the seven classes, were tallied for each of the three periods, and converted to percentages of the totals for each period.

At the end of the early period (1937), three large national parks and a handful of smaller scenic sites were reserved. By the end of the middle period (1970), this area had more than doubled, to incorporate a further five national parks and over 40 smaller scenic sites. In the late period, between 1971 and 1992, the Tasmanian State Reserve system experienced a great expansion. By 1992, an additional 235 grid squares in the State were completely or partially occupied by national parks and equivalent reserves. That is, two thirds of the grid squares in this analysis were reserved in the two and a half decades since the start of the 1970s, while one third were reserved during the previous five and a half decades.

In the early period (Figure 6.2), over 50% of the statewide area reserved was in the highest two scenic classes. There is a strong trend in the data, with the percentage of areas reserved consistently decreasing with decreasing scenic value. That is, the high scenic value end of the range was well represented, while areas of low scenic value were poorly represented, decreasing to 0% representation in the lowest scenic class (class 7). The majority of reserves established in this early period were in areas of high to moderate relative scenic value. Only 2.7% of reserves occurred in the two lowest scenic value classes.

At the end of the middle period, the same general trend existed, but to a lesser degree (Figure 6.2). There was an overall decrease in percentage areas from high to low scenic value, but there was much greater variation across the range of scenic classes. All classes were represented

in this period. The two classes of highest scenic value encompassed nearly 40% of the areas reserved - 10% less than the representation in the early period, while 18% of the areas reserved were in the two lowest scenic value classes. The trend showed an initial drop in scenic value by percentage in each class, then a levelling off to an equal share of areas (14.3%) falling in classes 3-5 (moderate scenic value). The representation of areas again fell as scenic value decreased, with 7.8% of the areas reserved falling into class 6, then a small increase to 10.4% in the class of lowest scenic value.

In the period ending 1992 (Figure 6.2), there was a clear shift to an increase in the reservation of areas of lowest scenic value, with a corresponding decrease in high scenic value areas. While all scenic classes were represented, only 22.1% of the areas reserved in this period fall in the two classes of highest scenic value (nearly 30% less than in 1916-1937 and 20% less than in 1938-1970). This represents a significant change in the reservation of scenery over this late period of national park development in the State. One third of areas (34%) fell into the two lowest scenic value classes, class 6 (low scenic value) had the greatest share of areas (18.7%) and class 1 (high scenic value), the lowest share (9.8%). However, there was much less variation in the percentage values for each class in this period than for other times, particularly the first period.

Large reserves versus small reserves

The reserves established during all time periods comprised both large and small reserves. This analysis looks at the differences in scenic value of large reserves versus small reserves for each historic time period. In this study, large reserves are taken to comprise National Parks, some State Reserves (>5000 ha), and the Tasmanian Wilderness World Heritage Area. Small reserves were classed as those reserves less than 5000 ha in area (including some State Reserves, Nature Reserves, Game Reserves and Aboriginal Sites).

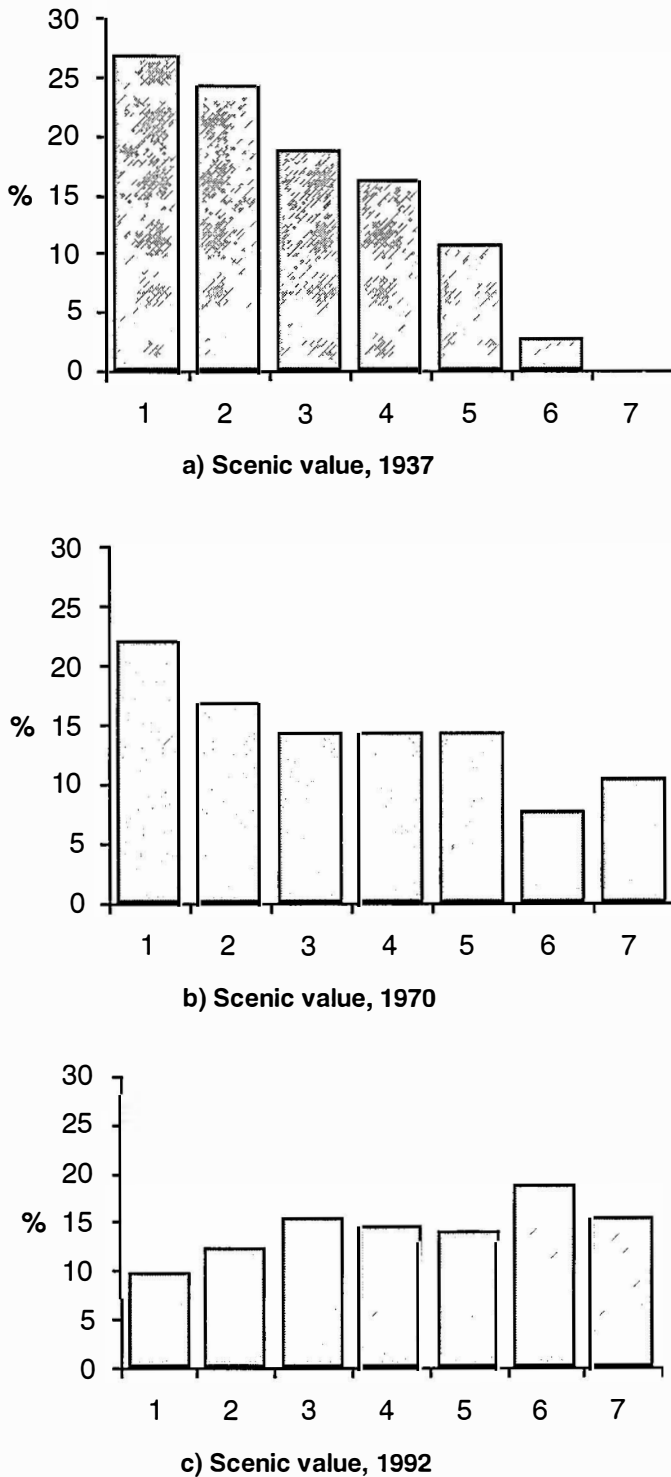


Figure 6.2: Relative scenic value of national parks and equivalent reserves established from 1916-1992. Graphs show percentage of 10 km x 10 km grid squares reserved in seven classes of scenic value, ranging from 1 - high scenic value to 7 - low scenic value.

For each of the three time periods, the large reserve data were separated from the small reserve data and analysed in the same manner as that used for the previous study (percentages of 10 km x 10 km grid squares reserved, falling into each of seven scenic classes). The aim of this investigation was to determine if the inclusion of small reserves in the analysis had any significant effect on scenic scores for each time period, and to determine the types of areas encompassed by the larger national parks, as opposed to the smaller reserves.

1916-1937

In 1937, the highest scenic classes were best represented in the large reserve data, with a decline in representation with decreasing scenic value (Figure 6.3). The small reserve data show a strong grouping of areas in the moderate to high range of scenic value, with classes 2-4 all sharing the same percentage representation (Figure 6.3). Class 1 (high scenic value) is not as strongly represented as classes 2-4. None of the small reserves occurred in areas of low scenic value.

The separation of large and small reserve data appears to have made little difference to the general trend in the reservation of scenic value of the larger national parks reserved in this early period. That is, the national parks were established at that time in areas of high scenic quality.

1938-1970

In 1970, the large reserve data showed a decline in the percentage of areas reserved, with decreasing scenic value - the same trend as that of large reserves in the earlier period (Figure 6.4). This is similar to that of the combined data for this period (shown in Figure 6.1), except that with the removal of small reserves from the analysis, the trend appears stronger.

The scenic value of small reserves (Figure 6.4), is quite different to that of the early period, showing much greater variation in data, encompassing all scenic value classes. The areas in which small

reserves were created range from high to low scenic value, with no particular trend evident. The smaller reserves created during this period include a greater variety of scenic sites, such as bays, passes, gorges, lookouts, and cliffs. This may account for the variation of scenic values of these small reserves.

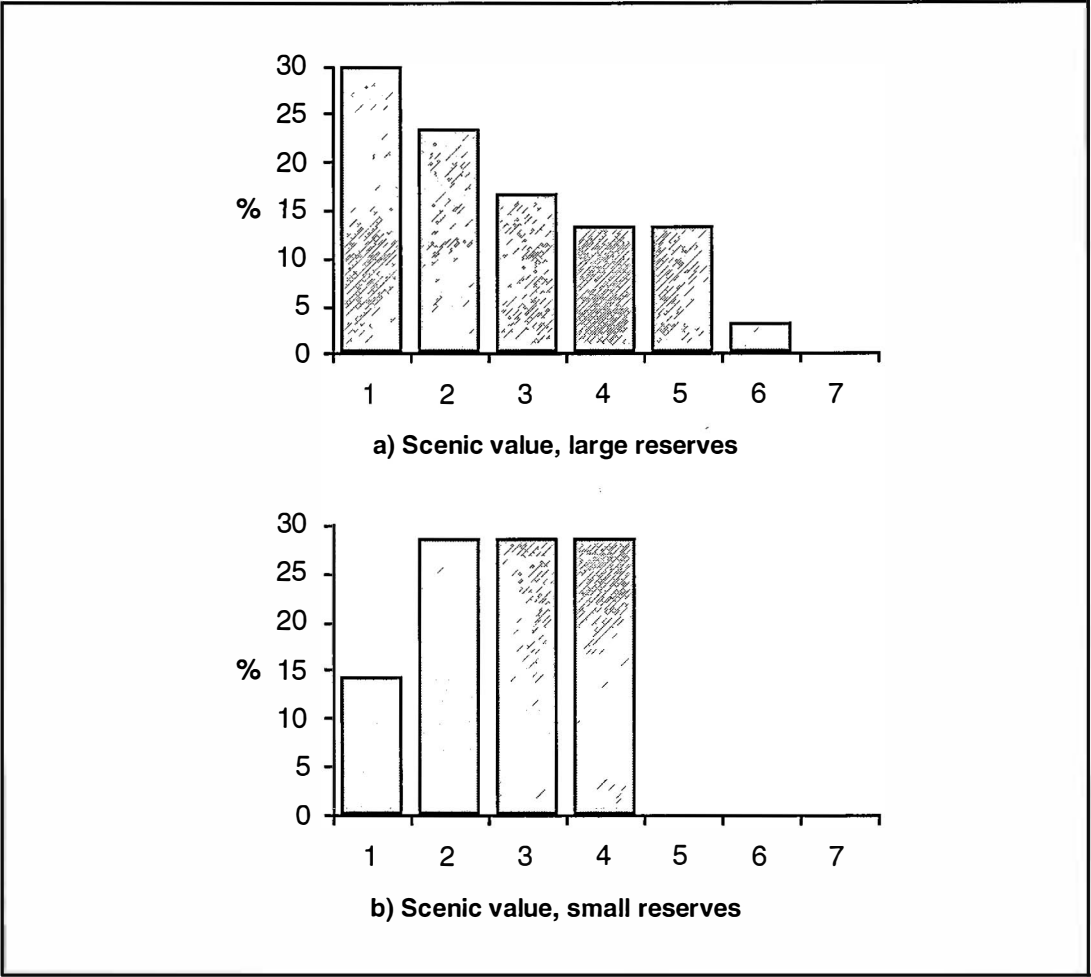


Figure 6.3: Relative scenic value of large and small reserves created between 1916 and 1937. Graphs show percentage of 10 km x 10 km grid squares reserved in seven classes of scenic value, ranging from 1 - high scenic value to 7 - low scenic value.

While the small reserve data show a considerable amount of variation, the extraction of this from the larger data set does not significantly alter the trend for this period. The larger reserves (national parks) encompassed more areas of high scenic value than low scenic value, and in fact, this trend was strengthened by excluding smaller reserves from the analysis. This is similar to the early period, although there is greater spread in the data, with areas being reserved across the full range of scenic quality.

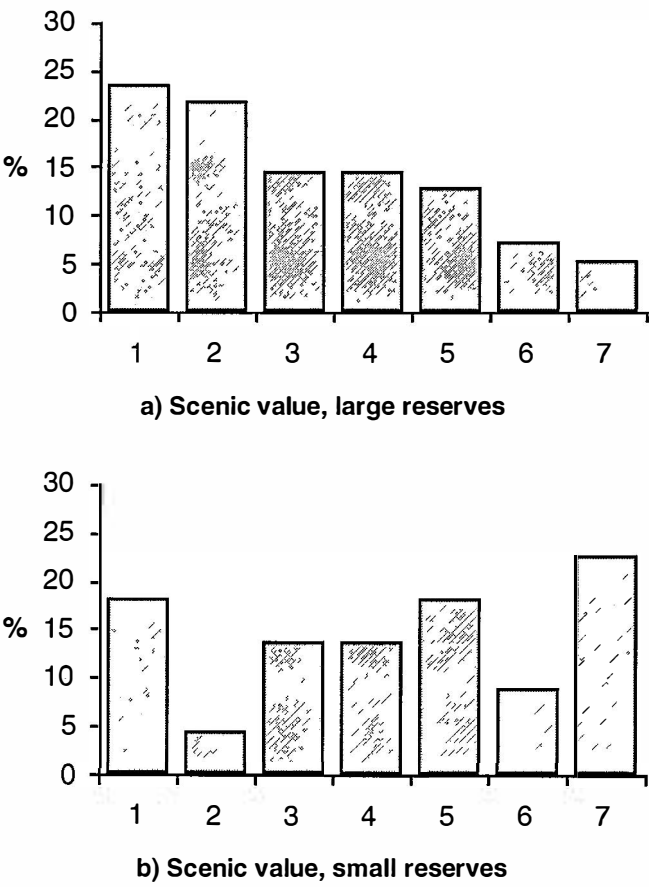


Figure 6.4: Relative scenic value of large and small reserves created between 1938 and 1970. Graphs show percentage of 10 km x 10 km grid squares reserved in seven classes of scenic value, ranging from 1 - high scenic value to 7 - low scenic value.

1971-1992

The large reserves established between 1971 and 1992 include both national parks and the Tasmanian Wilderness World Heritage Area. The scenic values of the areas encompassed by these reserves (Figure 6.5), are spread relatively evenly across all scenic classes. The percentage of areas falling in some scenic classes have shifted slightly since 1970, for example, class 1 (high scenic value) has increased, while class 6 (low scenic value) has decreased. However, the extraction of smaller reserves created in this period from the data set has had little overall impact.

In 1992, the small reserves tended to be more concentrated in areas of lower scenic value, with the two bottom classes having 45% of the total share (Figure 6.5). Although all scenic classes were represented, there is a definite shift in the small reserve data from the early period towards the low scenic value end of the spectrum. The types of small reserves established during this period represent a wide range of purposes and localities, including specific areas reserved for rare and threatened species and communities. These often occur as remnants in landscapes altered by humans, and are not restricted to areas of high scenic value.

Discussion

During the first four decades of national park establishment in Tasmania, reserves were concentrated in country of high scenic quality. In the later decades of the twentieth century, and especially between 1971 and 1992, areas of low scenic quality were more prevalent in reserved areas than areas of high scenic quality, in marked contrast to the situation in both 1937 and 1970.

Part of this tendency towards the reservation of lower scenic quality areas in the period post-1970 may be attributable to the fact that most of the areas of very highest scenic quality were reserved in the first two time periods, leaving areas of lower scenic quality for reserve expansion. However, despite a documented decline in mean natural scenic quality within the national park estate between 1937 and 1992, a

large and increasing proportion of the resource has been included. There is also no doubt that the peaks of natural scenic quality in Tasmania are concentrated in the reserve system (Figure 6.1). The poorer representation of natural coasts than other elements of natural aesthetic value in the reserve system may reflect their relatively high degree of development potential. However, the relative lack of this natural scenic element in the reserve system appears to be in a process of redressal (Table 6.5).

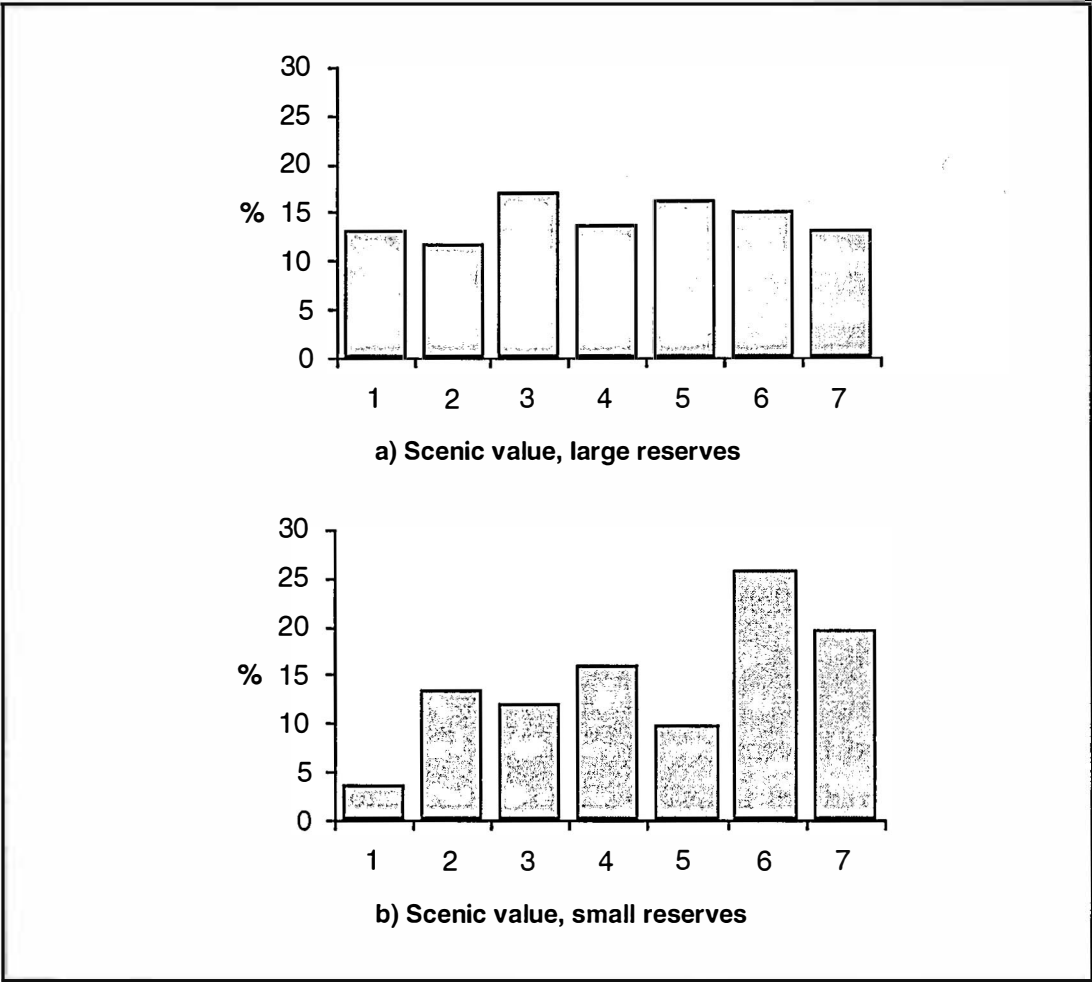


Figure 6.5: Relative scenic value of large and small reserves created between 1971 and 1992. Graphs show percentage of 10 km x 10 km grid squares reserved in seven classes of scenic value, ranging from 1 - high scenic value to 7 - low scenic value.

The pictorial content analysis showed that there is communality in what people tend to regard as attractive or high quality scenery. In Tasmania, this is typified by rugged mountains, lakes, coastline, and other specific scenic attributes. Combinations of these features create landscapes in which there are many possibilities of viewing highly attractive scenes. These outcomes were consistent with scenic preference theory based on personal preference studies.¹⁴ However, there is an obvious need to cross-calibrate the two methods, with very little research being undertaken in this area.¹⁵

One of the most fascinating findings of the pictorial content analysis was that not only does there appear to be a popular appreciation of scenery, but this has not changed over time. The mountainous post-glacial landscapes and rugged coastlines represented in very early promotional publications of Tasmania, still feature as the favoured scenes at the end of the century. One might suggest that the romantic notions of scenery that dominated late nineteenth and early twentieth century aesthetes, are alive and well a century on.

The first period of national park creation in Tasmania was typified by the reservation of both large areas of land, as national parks, and smaller areas, as scenic sites. During this period, both large and small reserves were established in areas of high scenic quality. Very few areas were reserved in landscapes of low scenic quality. Mt Field National Park and Cradle Mountain - Lake St Clair National Park both encompass areas of high relief, with landscapes carved by past glacial activity. Freycinet National Park is quite different in character to these reserves, but offers high quality coastal scenes, combined with the relief of imposing granite hills.

The bias towards reserving areas of dramatic and romantic scenery continued throughout the middle period, until the 1970s. The national parks and larger scenic reserves created pre-1971 included typically mountainous and/or coastal areas such as Ben Lomond, Frenchmans Cap, Hartz Mountains, South-West, and Rocky Cape. Some of these areas were promoted for reservation by government officials of the time (refer to Chapter 3). This contributed to the continuation of

scenery as an important theme, particularly when considering the potential gains from tourism.

From the 1970s to the last decade of the twentieth century, there was a considerable shift in the relative significance of the scenery conservation theme. In this era, which was typified by a great expansion in the reserve system, the types of areas reserved as national parks in Tasmania declined in scenic value. For example, the Tasmanian Wilderness World Heritage Area was created during this period, encompassing a vast area of western and south-western Tasmania. Within this reserve there are large areas of high relief and diverse landscapes, some of which were established in earlier time periods as national parks (Cradle Mountain - Lake St Clair, Walls of Jerusalem, South-West, Hartz Mountain and Franklin - Gordon Wild Rivers - previously Frenchmans Cap). However, the World Heritage Area also includes large areas of lower relief and diversity, such as expanses of buttongrass moorland.

The post-1970 trend towards the lower scenic value end of the scale is also strongly apparent in the small reserves, which encompass a very wide range of areas, and serve numerous specific conservation purposes. For example, the Township Lagoon Nature Reserve was created on the old Tunbridge tip site in the central Midlands of Tasmania for rare species protection. In comparison with other areas of the State, many would consider this a relatively featureless and uninteresting landscape.

The relative significance of scenery conservation thus appears to have declined over time. This suggests that other themes may have become of higher relative significance in the development of the reserve system during the later decades of the twentieth century, such as wilderness and biodiversity conservation.

ENDNOTES - CHAPTER 6

1. Mendel, L. C. and Kirkpatrick, J. B., 1999. Assessing temporal changes in the reservation of the natural aesthetic resource using pictorial content analysis and a grid-based scoring system - the example of Tasmania, Australia. *Landscape and Urban Planning*, 43 (4), 181-190.
2. United Nations, 1994. *Operational Guidelines for the Implementation of the World Heritage Convention*. Intergovernmental Committee for the World Cultural and Natural Heritage. United Nations Educational, Scientific and Cultural Organisation, New York.
3. Bishop, I. D. and Hulse, D. W., 1994. Prediction of scenic beauty using mapped data and geographic information systems. *Landscape and Urban Planning*, 30, 59-70.
- Blankson, E. J. and Green, B. H., 1991. Use of landscape classification as an essential prerequisite to landscape evaluation. *Landscape and Urban Planning*, 21, 149-162.
- Daniel, T.C. and Bolster, R.S., 1976. Measuring landscape aesthetics: the scenic beauty estimation method. *US Forest Service Resource Paper*, RM-167.
- Fines, K. D., 1968. Landscape evaluation: a research project in East Sussex. *Regional Studies*, 2 (1), 41-45.
- Linton, D. L., 1968. The assessment of scenery as a natural resource. *Scottish Geographical Magazine*, 84, 119-238.
- Steinitz, C., 1990. Toward a sustainable landscape with high visual preference and high ecological integrity: the Loop Road in Acadia National Park, U.S.A. *Landscape and Urban Planning*, 19, 213-250.
- Thorne, J. F. and Chang-Shan Huang, 1991. Toward a landscape ecological aesthetic: methodologies for designers and planners. *Landscape and Urban Planning*, 21, 61-79.
4. Shafer, E. L., Hamilton, J. F. and Shmidt, E. A., 1969. Natural landscape preference: a predictive model. *Journal of Leisure Resources*, 1, 1-19.
- Bishop, I.D. and Leahy, P.N.A., 1989. Assessing the visual impact of development proposals: the validity of computer simulations. *Landscape Journal*, 8, 92-100.
- Cook, P.S. and Cable, T.T., 1995. The scenic beauty of shelterbelts on the Great Plains. *Landscape and Urban Planning*, 32, 63-69.
- Daniel and Bolster, 1976, *op. cit.*
- Steinitz, C., 1990, *op. cit.*
- Zube, E.H., 1973. Rating everyday rural landscapes of the northeastern U.S. *Landscape Architecture*, 63, 92-97.
- Zube, E.H., Brush, R.D. and Fabos, J.G., 1975. *Landscape Assessment, Values, Perceptions and Resources*. Dowden, Hutchinson and Ross, Stroudsburg, PA.
5. Bishop, I. D. and Hulse, D. W., 1994, *op. cit.*

Bishop, I.D. and Leahy, P.N.A., 1989, *op. cit.*

Kaplan, S., Kaplan, R. and Wendt, J.S., 1972. Rated preference and complexity for natural and urban visual material. *Perception Psychophysics*, 12, 354-365.

Ribe, R.G., 1986. A test of uniqueness and diversity visual assessment factors using judgement-independent measures. *Landscape resources*, 11 (2), 13-15.

Shafer *et. al.*, 1969, *op. cit.*

Zube, 1973, *op. cit.*

6. For example, Williamson, D. N. and Calder, S. W., 1979. Visual resource management of Victoria's forests: a new concept for Australia. *Landscape Planning*, 19, 251-262.

Yang, B.E. and Kaplan, R., 1990. The perception of landscape style: a cross-cultural comparison. *Landscape and Urban Planning*, 19, 251-262.

7. Steinitz, 1990, *op. cit.*

8. Angus, M., 1975. *The World of Olegas Truchanas*. The Olegas Truchanas Publication Committee, Hobart.

Barrett, C., 1944. *Isle of Mountains: Roaming Through Tasmania*. Cassell and Co. Ltd.

Beatty, B., 1967. *Tasmania: Isle of Splendour*. Cassell Australia Ltd., Melbourne.

Brogden, S., 1949. *Tasmanian Journey*. Morris and Walker Pty. Ltd., Melbourne.

Country Women's Association in Tasmania, 1961. *Tasmania. This Lovely Isle*.

Dombrovskis, P., 1988 and 1990-1996. *Wilderness Diary*. West Wind Press, Tasmania.

Emmett, E. T., 1954. *Tasmania by Road and Track*. Cambridge University Press.

Flagg, c1990s. *Tasmania, Australia* (brochure).

Hurley, F., 1953. *Tasmania: A Glance at its History, Beauty, Resources and Development Over a Period of 150 years*. John Sands Pty. Ltd., Sydney.

Morton, C. E., 1899. *Tourists Guide to Tasmania* (2nd Edn.). Union Line of Steamers, The Mercury Office, Hobart (brochure).

Porter, G., 1920s/1930s. *Wanderings in Tasmania*. Selwyn and Blout Ltd.

Postcard Series, c1910. *Souvineer of Tasmania and Views of Hobart and Southern Tasmania*..

Postcards c1930s. *Souvineer of Tasmania. Queenstown, Gordon River e.t.c. West Coast of Tasmania*. Spurlings Pty. Ltd., Launceston.

Postcards, 1940-1970. *Scenic Postcards of Tasmania*.

Pringle-Jones, J., 1981. *Discovering Tasmania: Australia's Holiday Wonderland*. Decalon Pty. Ltd. (brochure).

Rowland, J., 1958. *Tasmania Yesterday and Today*. MacMillan and Co. Ltd.

Royal Automobile Club of Tasmania, c1960s. *Highway Guide to Tasmania*. (brochure).

Sands, J., 1903. *In Tasman's Land. Gleams and Dreams of the Great North-West*. The Emu Bay Railway Company Ltd.

- Smith, G., 1909. *A Naturalist in Tasmania*. Oxford.
- State Executive Committee c1920s/1930s *Come to Tasmania* (brochure).
- Tasmania Tourism Department, c1990s. *Tasmania*. (tourist brochure).
- Tasmanian Government Tourist Bureau, 1983/1984. *Tasbureau's Tasmania*. Acting Government Printer in Tasmania (brochure).
- Tasmanian Government Tourist Bureau, c1930s *Tasmania. The Wonderland*. Government Printer, Tasmania (brochure).
- Tasmanian Government Tourist Bureau, c1960s. *Tasmanian Holiday*. Mercury-Walsh (brochure).
- Tasmanian Government Tourist Bureau, Hobart, c1930s. *Tasmania for your Holidays*. The Lady Publishing Co. Pty. Ltd. (brochure).
- Tasmanian Government Tourist Department, c1920s. *Tasmania. Australia's Playground*. John Vail, Government Printer, Tasmania (brochure).
- Tasmanian Government, 1918. *Tasmania for the Tourist and Settler*. Government Printer, Tasmania.
- Tasmanian Government, 1937. *Tasmania. The Jewel of the Commonwealth*. Critchley Parker (brochure).
- Tasmanian Government, 1944. *A Booklet Containing a Brief Summary of the Resources and Educational and Social Activities of the State*. Premier's Department.
- Tasmanian Government, 1987. *Tasmania: Be Tempted*. (brochure).
- Tasmanian Government, c1940s. *A Hand Book of General Information*. John Vail, Government Printer.
- Tasmanian Government, c1940s/1950s. *Tasmania. Gem of the South*. L. G. Shea, Government Printer, Tasmania (brochure).
- Tasmanian Government, c1940s/1950s. *This is Tasmania*. L. G. Shea, Government Printer, Tasmania (brochure).
- Tasmanian Government? c1940s. *Tasmania. The Isle of Scenic Beauty*. Nucolorvue Productions. Mentone, Victoria (brochure).
- Tasmanian Government?, 1935. *Tasmania's Colour-Line Tours*. Government Printer, Tasmania (brochure).
- Tasmanian Tourism Department, 1996. *Tasmanian Expeditions, Australia*. (brochure).
- Tasmanian Tourism Department, c1990s. *Tasmania's West Coast: Wild, Magnificent...and Yours*. (brochure).
- Tasmanian Tourism Department, c1990s. *Tasmania: The Outdoor Experience*. (brochure).
- Tasmanian Tourist Association, 1906-1907. *Just the Thing for Tourists to Hobart, Tasmania* (6th Edn.). Tasmanian News (brochure).

- Tasmanian Tourist Association, 1908-1909. *Just the Thing for Tourists to Hobart, Tasmania* (8th Edn.). Tasmanian News (brochure).
- Tasmanian Tourist Association, Hobart, 1913-1914. *Tasmania for the Tourist*. Cox Print, Hobart (brochure).
- Tasmanian Tourist Association, Hobart, Southern Tasmania, c1920s. *Beautiful Tasmania*. John Vail, Government Printer (brochure).
- Tasmanian Tourist Bureau, 1990-1991. *Tasmania Visitors Guide*. (brochure).
- Tasmanian Tourist Department, c1940s. *Tasmania Holiday Island. For Holidays all the Year Round* (brochure).
- Tasmanian Tourist Promotion Council, Hobart, c1940s/1950s. *No Other Country in the World is Quite Like Tasmania*. Mirror Newspapers Ltd (series of newspaper clippings).
- Tassell, M. and Wood, D., 1981. *Tasmanian Photographer. From the John Watt Beattie Collection*. Queen Victoria Museum.
- Unknown author, pre-1900. *Tasmanian Views*. (booklet).
9. Shafer, et. al., 1969, *op. cit.*
- Zube, 1973, *op. cit.*
- Bishop and Hulse, 1994, *op. cit.*
- Bishop and Leahy, 1989, *op. cit.*
10. Mendel, L. and Kirkpatrick, J. B., 1994. *The Environmental Values of Reserves Under the Crown Lands Act 1976*. A Report to the Public Land Use Commission. Department of Geography and Environmental Studies, University of Tasmania.
11. Kirkpatrick, J.B. and Brown, M.J, 1991. Map: *Forest Vegetation of Tasmania*. Forestry Commission, Tasmania.
- Kirkpatrick, J.B. and Dickinson, K.J.M., 1984. Map: *Vegetation of Tasmania*. Forestry Commission, Tasmania.
12. Kirkpatrick, J. B. Database: *Refugia Database*. Department of Geography and Environmental Studies, University of Tasmania.
13. Cook and Cable, 1995, *op. cit.*
- Kaplan, et. al., 1972, *op. cit.*
- Ribe, 1986, *op. cit.*
14. Cook and Cable, 1995, *op. cit.*
- Daniel and Bolster, 1976, *op. cit.*
- Kaplan, et. al., 1972, *op. cit.*
- Shafer et. al., 1969, *op. cit.*
- Steinitz, 1990, *op. cit.*
- Zube et. al., 1975, *op. cit.*
15. Bishop and Hulse, 1994, *op. cit.*

CHAPTER 7

Wilderness

Introduction

Wilderness is a rapidly diminishing resource, and its preservation is heavily dependent on systems of secure reserves. The conservation of wilderness has been a major driving force in the promotion and development of national parks and reserves in many areas of the world where wilderness areas remain. This chapter examines the representation of wilderness within Tasmanian national parks and equivalent reserves over three historic periods. The specific aims are:

- map and calculate the historic extents of wilderness in Tasmania for the beginning and end of each time period under investigation: 1916; 1937; 1970; and 1992;
- determine the representation of wilderness in reserves proclaimed over the three historic periods of 1916-1937, 1938-1970 and 1971-1992;
- assess whether the relative significance of wilderness conservation in reserves has shifted in emphasis over time;
- provide data to determine the relative significance of wilderness conservation in relation to that of biodiversity (Chapter 5) and scenery (Chapter 6) conservation over time.

The origins of the modern concept of wilderness have been traced to the nineteenth century romantic movement.¹ Emerging against the growth of industrialism and the powerful world view of modernism, the romantic's ideas were expressed through philosophy, art and literature. Human-centred landscapes and the industrial machine were rejected as distasteful and a new focus was placed on wild and natural landscapes. Nature was viewed as not just fodder for the industrial machine but having intrinsic values independent of human use.

While modern definitions of wilderness vary according to differing philosophical standpoints and purposes of study, in most recent wilderness inventories, there is broad agreement that wilderness areas are natural areas, free from significant disturbance by non-indigenous peoples.² While naturalness, or primitiveness, and remoteness from settlement, disturbance and access comprise inherent wilderness attributes, the actual methods used to delimit wilderness areas have varied between studies.

The State of Tasmania has incurred an enormous loss to its area of wilderness since European settlement. As the wilderness resource has diminished over time, quantifying the extent of wilderness captured in the Tasmanian reserve system over the twentieth century necessitates the construction of historic wilderness maps for the State, for the time periods under study. This requires a method that is replicable over time and applicable to the nature of the available historic data.

Methods

Several wilderness inventories have been conducted in Australia from the mid-1970s, the earliest of which drew on American wilderness inventory procedures.³ The first large scale study of wilderness was undertaken in eastern New South Wales and southeastern Victoria (1976), and defined wilderness as having a minimum core area of 25 000 ha, free of major indentation and at least 10 km in width, surrounded by a buffer zone of about 25 000 ha or more.⁴ Wilderness areas were plotted using satellite images and topographic maps, according to the absence of human disturbances (including vehicular roads, clearings and transmission lines). While a number of large wilderness areas were identified, this procedure has been criticised for its lack of consistent method, with resultant variations in the minimum distances of core wilderness areas from vehicular roads/tracks and other human disturbances, and in the width of wilderness buffer zones.⁵

Other early studies in Queensland (1977), Victoria (1979) and Tasmania (1979) loosely followed these procedures in identifying wilderness areas.⁶ These have similarly been criticised for their lack of consistency of approach.⁷ Using concepts of remoteness and primitiveness as essential wilderness attributes, Kirkpatrick (1979) developed a wilderness quantification procedure in Tasmania that was designed to be a replicable method for delineating wilderness areas.⁸ In this study, remoteness from access and environmental disturbances from modern technological society, was measured from the nearest access point for mechanised vehicles, and primitiveness as the arc of visibility and distance of any disturbance. Wilderness core areas were delimited by the distance travelled by walking a minimum half day (four hours) from access points and a minimum distance from disturbances, required to negate negative impacts on the wilderness experiences of users. This resulted in wilderness core areas being delimited as a minimum of 5 km from mechanised vehicle access points, surrounded by a buffer zone that extends from the core to the points of access.

Other wilderness inventories in Tasmania have used alternative minimum distances from access points for delimiting wilderness areas. Hawes and Heatley, for example, identified wilderness in Tasmania as land whose direct remoteness was 8 km from major intrusions.⁹ However, their initial assumptions in defining and assessing wilderness, and the use of an 8 km distance as a measure of direct remoteness have been criticised as being arbitrary.¹⁰

The concepts of remoteness and primitiveness that comprised essential wilderness attributes in the study of Kirkpatrick, have formed the basis for a 'wilderness continuum concept', on which a National Wilderness Inventory (NWI) has been developed. This inventory scales wilderness areas according to their remoteness from settlement, remoteness from access, aesthetic primitiveness and biophysical primitiveness.¹¹ Wilderness areas are rated according to their quality on a relative scale from low to high. While this procedure allows greater flexibility in interpretation of wilderness areas, it avoids the issue of delimiting core wilderness areas, and leaves the question of where wilderness areas begin and end open to much interpretation. Some of the methods used

to map wilderness quality also require data that is difficult to access and interpret historically.

In the present study, wilderness core areas were mapped as 5 km from access points for mechanised vehicles, surrounded by a buffer zone of 5 km in width. As has been the case in all wilderness inventories, disturbances resulting from modern technological society were excluded from wilderness core and buffer zone areas. These include all artificial impoundments, such as dams and associated hydroelectric developments, mining and other activities. Walking tracks and huts were considered acceptable human artefacts in wilderness areas, while any roads suitable for mechanised vehicles, including fire access trails, were considered to have the potential to significantly reduce wilderness values, and were thus excluded from wilderness zones. Coastal areas were included in wilderness zones, except where there were human constructed access points, such as wharves.

Archival and modern maps showing the statewide extent of settlement, major and minor vehicular roads and walking tracks were used as the data sources for the wilderness mapping exercise, which required a high level of mapping detail. Where suitable maps were not published in the exact years under study, the closest available maps were used.

Four maps were created to show the extent of wilderness core areas and buffer zones at the beginning and end of each major period of national park development: 1916; 1937; 1970; and 1992. The maps encompass the mainland of Tasmania and minor offshore islands. Bass Strait islands (including Flinders, King and Cape Barren Islands) were not included in the analyses due to a lack of relevant mapped data in the earlier time periods. Historic reserve boundaries were overlain on the constructed historic wilderness maps and the extent of core wilderness and buffer zone wilderness in reserves were delimited and areas calculated for the end of each time period.

The mapped data sources used were:

1916 - *Tourist Map of Tasmania*, 1915, Sheets 1-2, Government Tourist Bureau. Scale - 1 inch: 5 miles. Archives Office of Tasmania.

- 1937 - *Tourist Map of Tasmania*, 1936, Sheets 1-2, Government Tourist Bureau. Scale - 1 inch: 5 miles. Archives Office of Tasmania.
- Tasmania*, c1940-1950, Sheets 1-4, Surveyor General's Office, Hobart. Scale - 1 inch: 5 miles. Archives Office of Tasmania
- 1970 - *Tasmania*, 1968, Sheets 1-8, Surveyor-General's Office, Hobart. Scale - 1:250 000.
- 1992 - *Tasmania*, 1994, Sheets 1-4 (South West, South East, North West, North East), Second Edition, Land Information Bureau, Department of Environment and Land Management, Hobart. Scale - 1:250 000.
- Visitors Map of Tasmania*, 1994, Tasmania Department of Tourism, Sport and Recreation and Land Information Bureau, Department of Environment and Land Management. Scale - 1:500 000.

Results

Historic statewide extents of wilderness, 1916-1992

The statewide area of wilderness, before European settlement was 6 833 100 ha. By 1916, this was reduced to a core of approximately 2 941 200 ha - a wilderness loss of 57% from the original pre-European area (Table 7.1). Over one half of the core wilderness in the State in 1916 encompassed a large area of southwest and central-west Tasmania (Figure 7.1). Three large fragmented blocks occurred in the northwest, with ten substantial blocks of wilderness in the central-east coast and northeastern sectors of the State. Those areas of Tasmania most affected by wilderness loss were the southeast, Midlands and northern coastal areas, reflecting patterns of settlement and land use in the more accessible parts of the State, after more than a century of occupation.

In the period between 1916 and 1937, the statewide loss of wilderness area was relatively small (7%), with approximately 2 733 400 ha of core wilderness (40% of the pre-European area) remaining in 1937 (Table 7.1; Table 7.2). In this period, the large core wilderness area of southwest and central-west Tasmania was split by the construction of the Lyell

Highway to link the east and west coasts, and new access roads across the Cental Plateau area (Figure 7.2). With the exception of small reductions to wilderness areas on the Freycinet Peninsula (central-east coast) and around Waterhouse Point on the northeast coast, all other wilderness areas remained the same between 1916 and 1937.

Table 7.1: Statewide extents of wilderness core areas and wilderness loss from pre-European area over major periods of national park development.

	Statewide area (ha)	Loss from pre-European area (ha)	% loss from pre-European area
Pre-European	6 833 100		
1916	2 941 200	3 891 900	57.0
1937	2 733 400	4 099 700	60.0
1970	1 924 000	4 909 100	71.8
1992	1 098 100	5 735 000	83.9

Table 7.2: Wilderness loss over three historic periods.

	Wilderness loss (ha)	% loss
1916-1937	207 800	7
1938-1970	809 400	30
1971-1992	825 900	43

Between 1938 and 1970, there was a 30% decrease in the statewide wilderness area, with only 1 924 000 ha, or 28% of the pre-European area of core wilderness remaining in 1970 (Table 7.1; Table 7.2). Three wilderness areas completely disappeared during this period (two in the northeast and one in the northwest), and with the exception of two, all other wilderness cores were reduced in size (Figure 7.3). The largest of the northwest wilderness areas expanded and a new wilderness area appeared on the west coast, due to the abandoning of old mines and the roads that served these areas. By 1970, the largest remaining wilderness areas were in the western and southwestern parts of the State, although

these had been increasingly fragmented and reduced in area over time. The remaining wilderness areas in the east of the State had been significantly reduced in size and become increasingly isolated.

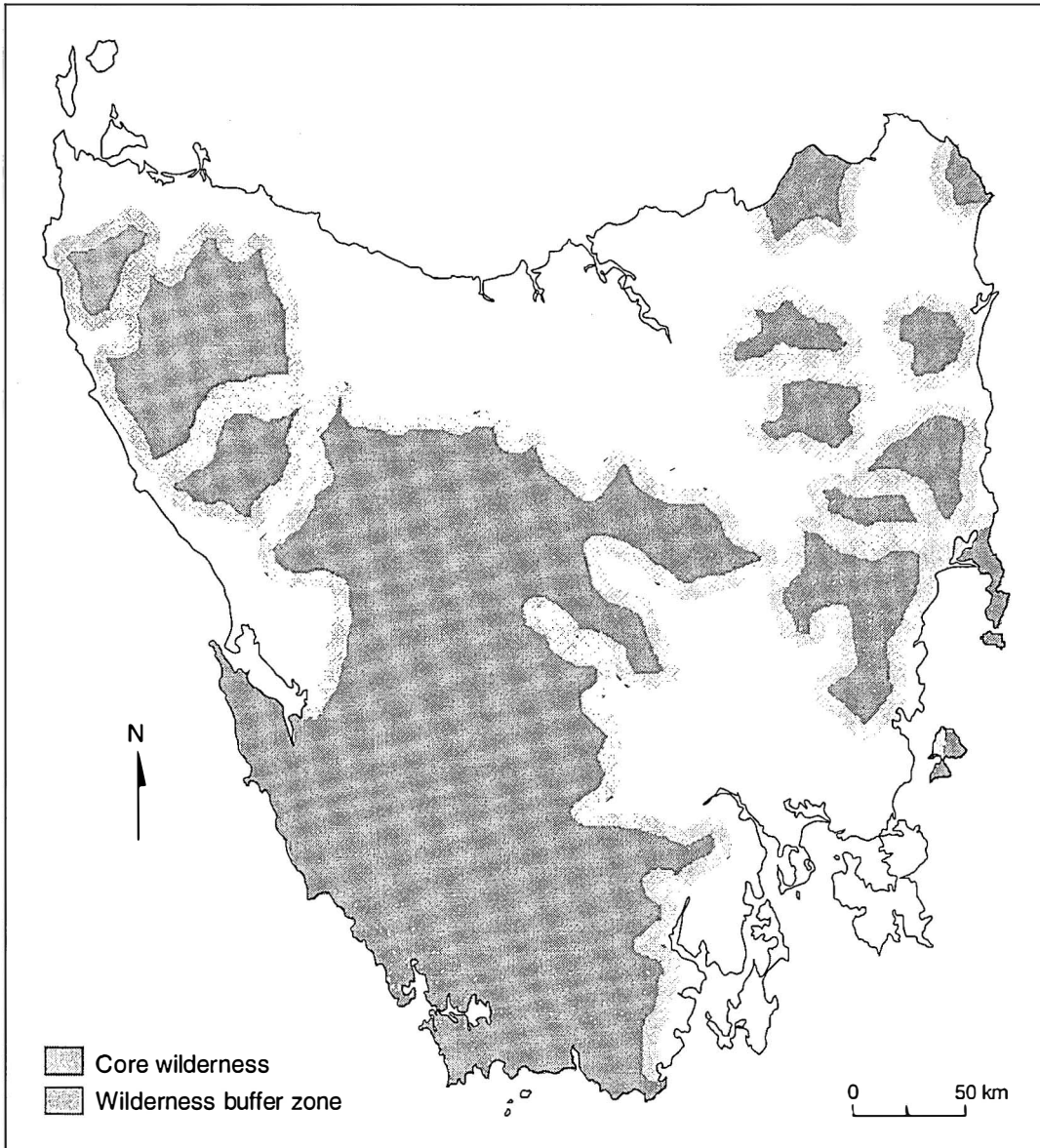


Figure 7.1: Statewide extent of wilderness, 1916.

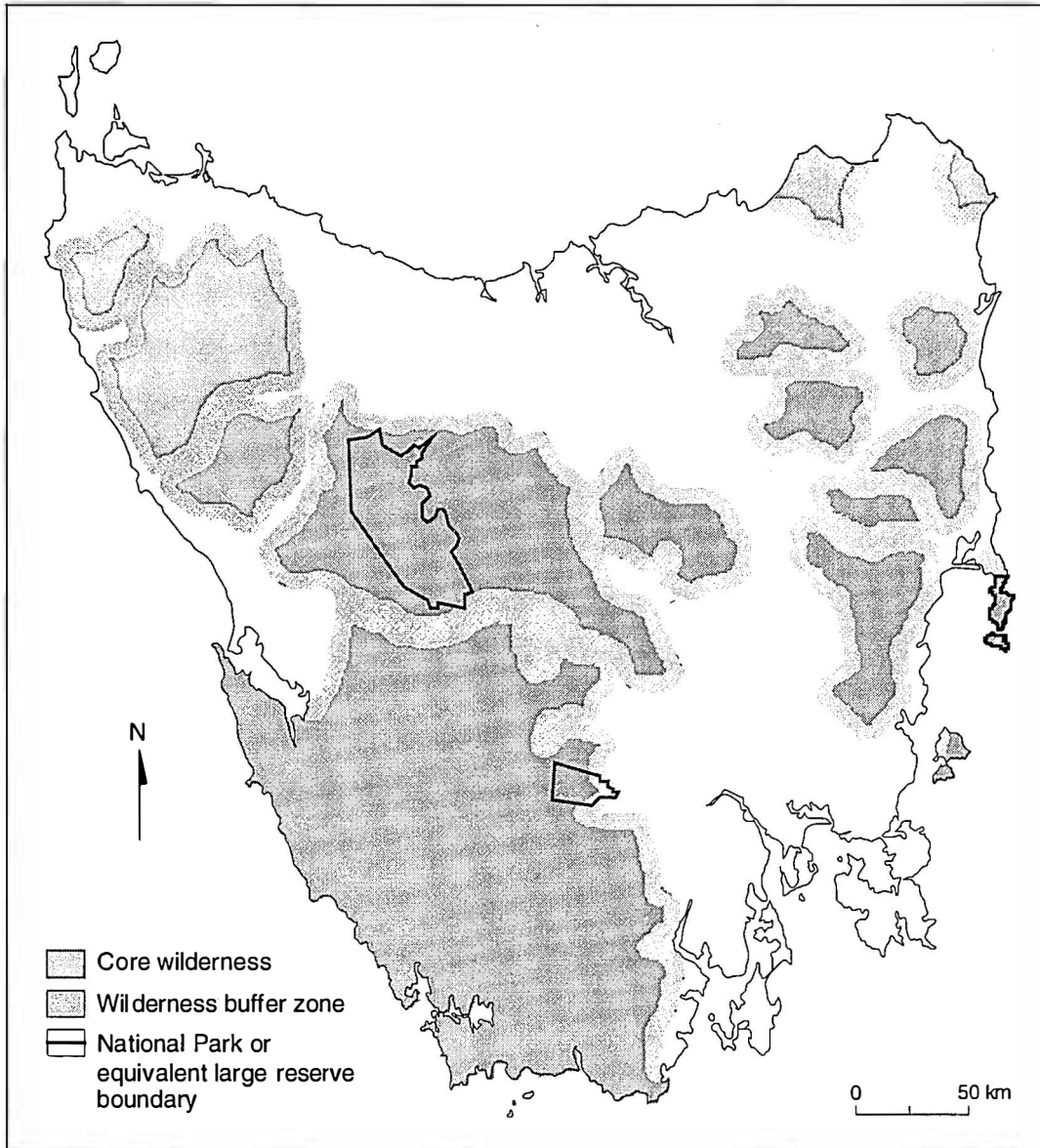


Figure 7.2: Statewide extent of wilderness and reserve boundaries, 1937.

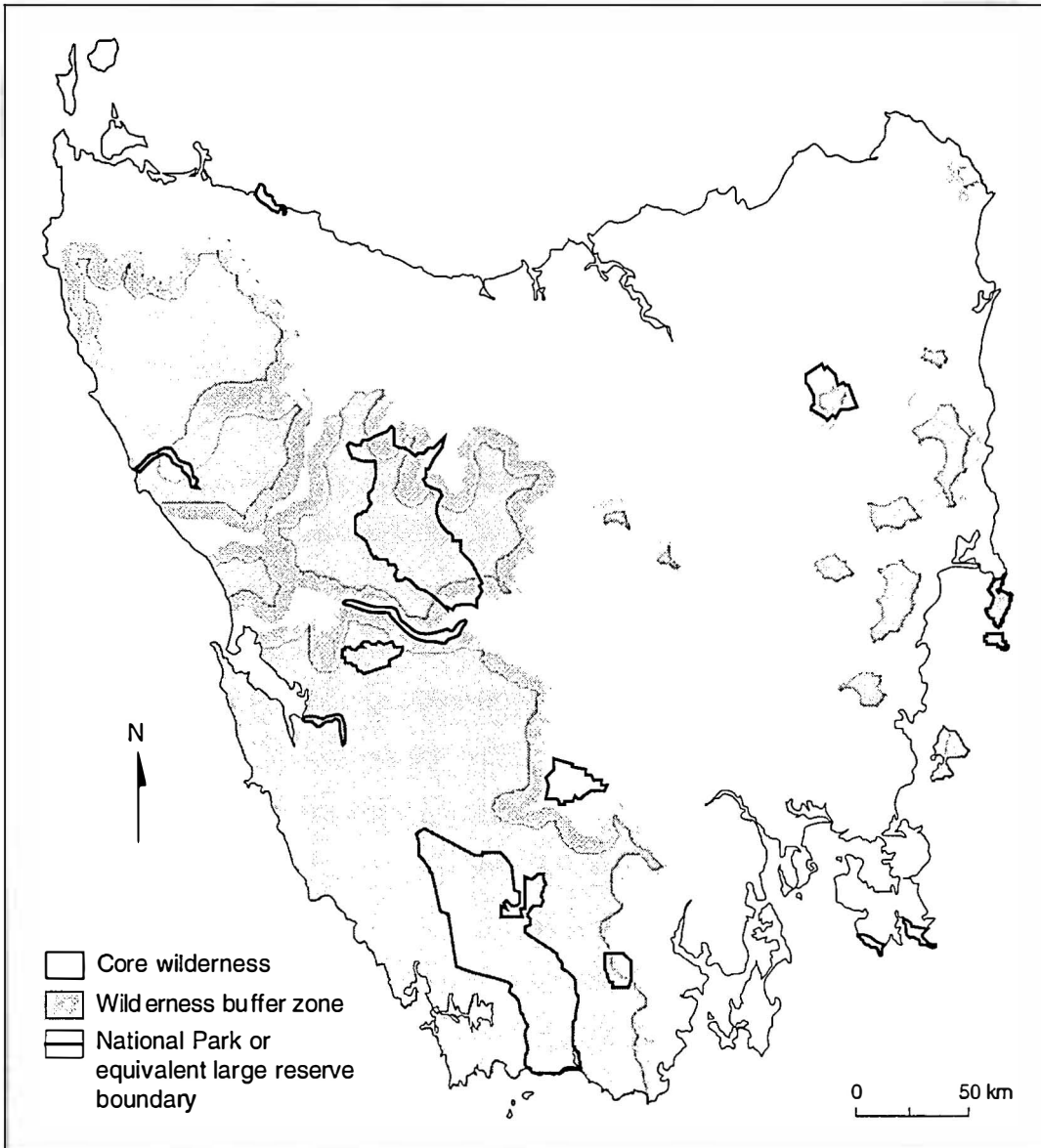


Figure 7.3: Statewide extent of wilderness and reserve boundaries, 1970.

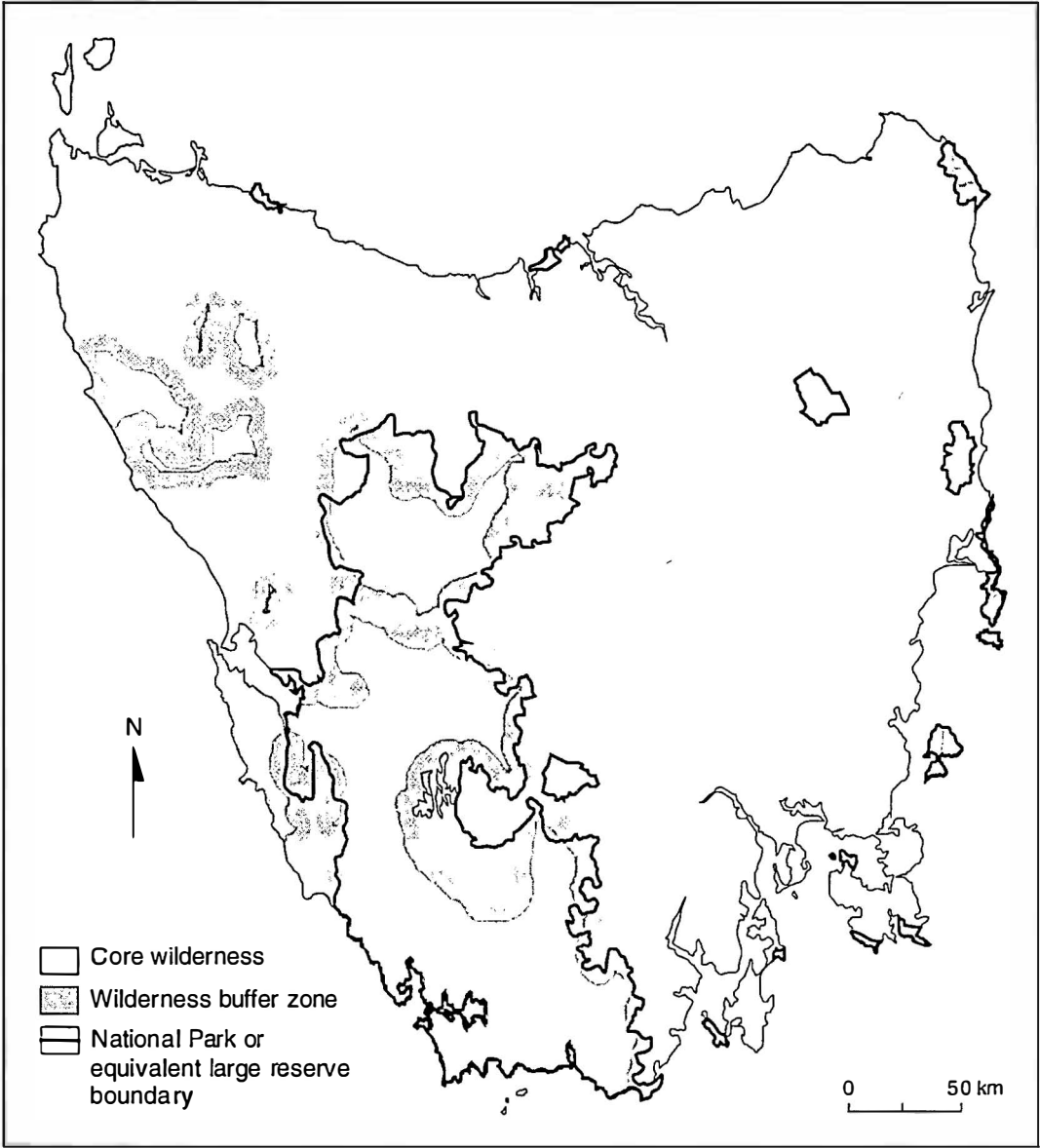


Figure 7.4: Statewide extent of wilderness and reserve boundaries, 1992.

The greatest loss of wilderness occurred between 1971 and 1992. By 1992, the statewide area of wilderness core was 1 098 100 ha, a loss of 43% over the period and an 84% reduction in the pre-European area of wilderness (Table 7.1; Table 7.2). During this period, there was significant attrition of the southwest wilderness core, with the flooding of Lake Pedder and associated dam and road construction works for hydroelectric development (Figure 7.4). The northwest wilderness areas were reduced in size and with the exception of small wilderness areas on the Freycinet Peninsula, Maria Island and on the northeast coast at Mt William, all wilderness areas in the east of the State had disappeared by 1992.

Representation of wilderness in reserves

1916-1937

By the end of 1937, there were three large national parks proclaimed in the State, all of which were established in wilderness areas (Figure 7.2). A total of 138 380 ha of core wilderness and 5 200 ha of wilderness buffer zone was captured in the reserve system, with a wilderness core: buffer zone ratio in reserves of 26.6:1 (Table 7.3). The total land area reserved in national parks and equivalent large reserves (>2 000 ha) during this period was 143 968 ha. Of this area, 96.0% was in wilderness core areas, 3.6% in wilderness buffer zone areas and 0.4% in non-wilderness. While these early reserves were established in wilderness areas, the total statewide extent of core wilderness in 1937 was nearly three million hectares, with only 5.1% of this being represented in the reserve system.

1938-1970

At the end of the middle period (1970), five additional national parks had been established in the State, and three equivalent large reserves over 2 000 ha in area (Figure 7.3). A total of 351 130 ha of core wilderness and 53 210 ha of buffer zone wilderness was captured in the reserve system in 1970, with a wilderness core: buffer zone ratio in reserves of 6.6:1 (Table 7.3). With the exception of Rocky Cape National Park on the northwest coast, all large reserves established during this

period were in areas of wilderness. In 1970, the total area of the State reserved was 416 627 ha, with 84.2% of this in wilderness core areas, 12.7% in wilderness buffer zone areas and 3.1% in non-wilderness. While the total statewide area of wilderness core was reduced by over 800 000 ha between 1937 and 1970, the representation of core wilderness in reserves increased from 5.1% in 1937 to 18.3% in 1970.

Table 7.3: Representation of wilderness core and buffer zone areas in reserves over three historic periods.

	Reserved area (ha)		Ratio of core:buffer
	Core wilderness	Buffer zone wilderness	
1937	138 380	5 200	26.6:1
1970	351 130	53 210	6.6:1
1992	993 070	292 960	3.4:1

1971-1992

By the end of the late period (1992), the reserve system had greatly expanded to cover 1 578 919 ha of the State (national parks and equivalent large reserves > 2 000 ha in area). A large share of this expansion was in the creation of the Tasmanian Wilderness World Heritage Area in the southwest and central-western areas of the State, encompassing the largest remaining block of statewide wilderness at the end of this period (Figure 7.4). Nearly one million hectares of wilderness core (993 070 ha) was captured in the reserve system in 1992, and 292 960 ha of wilderness buffer zone, with a wilderness core: buffer zone ratio in reserves of 3.4:1 (Table 7.3). Of the one and a half million hectares reserved in 1992, 62.8% was in wilderness core areas, 18.6% in wilderness buffer zone areas and 18.6% in non-wilderness. Despite there being a large attrition to the statewide extent of wilderness between 1970 and 1992 (a loss of 39%), the representation of wilderness core in the reserve system increased over this period, from 18.3% in 1970 to 90.4% in 1992.

Discussion

There has been a massive decrease in the statewide extent of wilderness over the century (63% between 1916 and 1992). At the same time, the representation of wilderness in national parks and equivalent reserves increased enormously. By 1992, 993 070 ha of core wilderness was captured in the reserve system, an increase of 618% from the end of the early period of national park development (1937).

The reservation of core wilderness increased over all time periods, with the largest growth occurring during the late period (1970-1992). The ratio of core wilderness to wilderness buffer zone in reserves decreased over the three periods of national park development, reflecting the general pattern of statewide wilderness loss and increasing fragmentation and indentation to core wilderness blocks over time.

While there has been a large increase in the total area of wilderness represented in the reserve system over time, the areas where reserves were established across all time periods were predominantly in tracts of wilderness. This may suggest that wilderness conservation has been an important historical theme throughout all periods of national park development. However, the extent of wilderness in many of the early reserves has decreased over time, reflecting management policies that are inconsistent with wilderness conservation.

The three large national parks established in the early time period have all suffered a loss of their wilderness resource over time, through the opening up of reserves by road construction and alternative land use activities in areas surrounding reserves. By the end of the middle period (1970), there was no wilderness remaining in Mt Field National Park, and the extent of wilderness in both Cradle Mt-Lake St Clair National Park and Freycinet National Park had been reduced. Similarly, by 1992, there was no wilderness remaining in Ben Lomond National Park in the north-east of the State, and the wilderness areas in Cradle Mt-Lake St Clair National Park and other reserves in the west and south-west of the State had been reduced in size.

The policy of increasing access to national parks is consistent with the viewing of these areas as scenic attractions and tourist destinations, and inconsistent with the maintenance of the wilderness resource. This suggests that wilderness conservation was not a significant theme in the early periods of national park development in Tasmania.

There have been no other studies that have reconstructed historic patterns of wilderness and assessed representations of the physical resource of wilderness in national parks and equivalent reserves over time. However, other historical works have provided no evidence that wilderness conservation was a significant motive for the creation of early national parks in Australia.¹² This is unlike the situation in the United States, where the concept of wilderness and its preservation was an important factor in the creation of early national parks.¹³

It has been suggested that in Australia, it was not until the late 1960s/early 1970s that the concept of wilderness developed as a major focus of conservation debate.¹⁴ This study supports the idea that wilderness conservation was a significant theme in the creation of reserves in the period post-1970. The creation of the Tasmanian Wilderness World Heritage area, for example, encompassing the largest remaining block of wilderness in the State, is evidence that wilderness conservation was a major driving force in the expansion of the reserve system between 1970 and 1992.

ENDNOTES - CHAPTER 7

1. Nash, R., 1982. *Wilderness and the American Mind*. Third Edition. New Haven: Yale University Press.
- Oelschlaeger, M., 1991. *The Idea of Wilderness*. Yale University Press.
2. Hall, C. M., 1987. Wilderness inventories in Australia. *Readings in Australian Geography*. Proceedings of the 21st Institute of Australian Geographers' Conference, Perth, 1986. Institute of Australian Geographers (WA Branch) and Department of Geography, University of Western Australia.
- Council of Nature Conservation Ministers, 1985. *Identification and Management of Wilderness Areas in Australia*. Department of Arts, Heritage and Environment, Canberra.
- Land Conservation Council, 1990. *Wilderness. Special Investigation Descriptive Report*. Melbourne, Victoria.
- Mosley, G., 1978. *Australia's Wilderness Conservation Progress and Plans*. Australian Conservation Foundation, Canberra.
3. Helman, P. H., Jones, A. D., Pigram, J. J. J. and Smith, J. M. B., 1976. *Wilderness in Australia. Eastern New South Wales and South East Queensland*. Department of Geography, University of New England, Armidale, NSW.
- Hall *et. al.*, 1976, *op. cit.*
4. Helman *et. al.*, 1976, *op. cit.*
5. Hall, 1987, *op. cit.*
- Kirkpatrick, J. B. and Haney, R. A., 1980. The quantification of developmental wilderness loss: the case of forestry in Tasmania. *Search*, 11 (10), 331-335.
6. Stanton, J. P. and Morgan, M. G., 1977. *Project 'RAKES' - A Rapid Appraisal of Key and Endangered Sites, Report No. 1: The Rapid Selection and Appraisal of Key and Endangered Sites: The Queensland Case Study*. A Report to the Department of Environment, Housing and Community Development, School of Natural Resources, University of New England, Armidale, NSW.
- Feller, M., Hooley, D., Dreher, T., East, I., and Jung, R., 1979. *Wilderness in Victoria: An Inventory*. Monash Publications in Geography No. 21, Department of Geography, Monash University.
- Russell, J. A., Matthews, J. H. and Jones, R., 1979. *Wilderness in Tasmania*. A Report to the Australian Heritage Commission, Centre for Environmental Studies Occasional Paper 10, Centre for Environmental Studies, University of Tasmania.
7. Kirkpatrick and Haney, 1980, *op. cit.*

Kirkpatrick, J. B., 1979. *Hydro-electric development and wilderness*. Report to the Department of Environment, attachment to: *Assessment of the HEC Report on the Lower Gordon River Development Stage Two*. Department of the Environment, Hobart.

8. *Ibid.*

9. Hawes, M. and Heatley, D., 1985. *Wilderness Assessment and Management*. A Discussion Paper, Wilderness Society, Hobart.

10. Hall, 1987, *op. cit.*

11. Lesslie, R. G. and Taylor, S. G., 1985. The wilderness continuum concept and its implications for wilderness preservation policy. *Biological Conservation*, 32, 309-333.

Lesslie, R. G., Taylor, D. and Maslen, M., 1993. *National Wilderness Inventory: Handbook of Principles, Procedures and Usage*. Australian Heritage Commission, Canberra.

Lesslie, R., 1991. Wilderness survey and evaluation in Australia. *Australian Geographer*, 22, 35-43.

Lesslie, R. G. and Taylor, S. G., 1983. *Wilderness in South Australia*. Centre for Environmental Studies Occasional Paper No. 1, Centre for Environmental Studies, University of Adelaide.

Lesslie, R. G., Mackey, B. G. and Preece, K. M., 1988. A computer-based method for the evaluation of wilderness. *Environmental Conservation*, 15 (3), 33-43.

Lesslie, R. G., Mackey, B. G. and Shulmeister, J., 1988. *Wilderness Quality in Tasmania*. Australian Heritage Commission, Canberra.

12. Frawley, K., 1988. The history of conservation and the national park concept in Australia: a state of knowledge review. In: Frawley, K. J. and Semple, N., (Eds.), *Australia's Ever Changing Forests*. Australian Defence Force Academy, Canberra, A.C.T., 395-417.

Mosley, G., 1978. A history of the wilderness reserve idea in Australia. In: Mosley, G. (Ed.), *Australia's Wilderness Conservation Progress and Plans*. Australian Conservation Foundation, Canberra.

13. Runte, A., 1976. The West: wealth, wonderland and wilderness. In: Wreford Watson, J. and O'Riordan, T., (Eds.), *The American Environment: Perceptions and Policies*. John Wiley and Sons, 47-62.

Runte, A., 1979. *National Parks: The American Experience*. Lincoln: The University of Nebraska Press.

Nash, R., 1982, *op. cit.*

Oelschlager, 1991, *op. cit.*

14. Land Conservation Council, 1990, *op. cit.*

Mosley, 1978, *op. cit.*

CHAPTER 8

Conclusion

National Parks in Tasmania

Changing motives and conservation themes

The historical study in Part One of this thesis suggests that the motives for creating national parks in Tasmania have changed over time. In the early period of national park creation (1916-1937), scenery and general nature preservation were the dominant motives of the reserve proponents, and these were closely linked with themes of recreation and tourism. The nature conservation motive was present in the proposals raised for all of the national parks established during the early period. This was largely argued on a general basis, rather than being directed towards particular biological elements or species.

The early national park proposals were directed towards highly aesthetic natural landscapes, typically encapsulating areas of popular scenic attraction, such as mountains, coastlines and waterforms. The scenery motive provided the basis of arguments of recreational and tourism potential, which were strongly advocated to promote the reserves. While these economic arguments had the greatest impact on the outcomes, they also comprised an intrinsic component of the motives behind the proponents. Many of those involved in promoting the creation of national parks in the early period had personal interests in outdoor recreational activities and were keen to see the national parks 'improved' to accommodate visitor activities.

Scenery, nature conservation, tourism and recreation motives and themes continued to dominate throughout the middle period of reserve creation (1938-1970). This was a period when the State was opened-up through new road networks and the rate of exploitation

of natural resources increased. Many of the reserves proposals during this period were motivated by threats to natural area values and the desire to protect scenery and nature from further damage. National parks were also promoted for their recreational and tourism potential, and efforts were made to improve access and facilities, where poor.

The scenery, tourism and recreation themes have been widely discussed in relation to the development of early national parks in many parts of the world. In the United States, Canada and New Zealand, for example, early reserves were established in landscapes of high aesthetic value, and the expansion of railways aided the development of these areas as tourist attractions.¹ It has been similarly suggested that Australia's first national parks were created for purposes of recreation, tourism and scenery preservation.² It is argued that nature conservation considerations, including the preservation of flora and fauna, were only a minor force in the creation of Australia's early national parks.³ While this may have been the case, it was certainly present as a dominant motive of the reserve proponents in Tasmania, although other economic arguments came to the fore in debates. While numerous studies have identified the importance of aesthetic and recreational arguments in early park declarations in Australia and elsewhere in the world, the actual motives of reserve proponents have been less examined.

Towards the end of the middle period a new wilderness theme emerged, particularly in association with south-west Tasmania. Wilderness conservation became the dominant motive behind much of the expansion of the reserve system during the late period (1971-1992). The nature conservation motive was also dominant during the late period, but became more specifically directed towards particular biological elements, which were poorly represented in the reserve system. While other arguments were present in the promotion of national parks, there was a relative shift away from scenery preservation, tourism and recreation during the late period as dominant themes.

Other studies in Australia have concluded that the wilderness conservation theme was not present in early reserve proposals, but became the focus of numerous conservation debates from the late 1960s.⁴ This contrasts with the situation in the United States and Canada, where the wilderness preservation motive has been traced to much earlier times, including some of the first national park proposals.⁵ In other areas of the world, where national parks have been established in largely cultural, rather than natural landscapes, the wilderness conservation motive has not played a role in reserve creation. Such is the case, for example, for many national parks in the United Kingdom and Europe.⁶

There have been few studies tracing changing conservation themes in national park development over time, particularly extending beyond the 1960s and early 1970s. In this thesis, the most significant changes in motives were identified as occurring in the late period of reserve creation (1971-1992). Some authors have suggested that since the creation of early national parks, there have been significant shifts in national park concepts.⁷ This idea is also touched upon in many studies of the emergence of the conservation movement and the growth of public support for environmental issues.⁸ However, there has been little detailed examination of this idea in relation to national park development and how changing ideas and motives may have driven the expansion of reserve systems in particular directions.

The expression of motives in the reserve system

Studies into national park development have largely examined historical evidence and none have attempted to quantify whether the motives actually relate to the attributes captured in national parks. The mapping analyses undertaken in Part Two of this thesis are unique in this respect. The quantifications of biological diversity, scenery and wilderness in national parks over three historical periods, and assessments of the relative significance of these themes over time, have shown that there is a strong relationship between motives and the capture of values in the reserve system.

The scenic analysis demonstrated, that in both early and middle periods, the types of areas in which national parks were established were of high aesthetic quality and popular appeal. The proportionate representation of high quality scenery in the reserve system decreased during the late period. This accords with the finding that the conservation of scenery was a dominant motive during the early and middle periods of national park creation, but was of lesser relative significance during the late period.

The representation of biological diversity in reserves was biased towards high altitude biological elements during the early and middle periods. This reflects the focus on mountainous scenic areas in early reserve selection. In the late period, a greater diversity of forest communities and vegetation types were represented in the reserve system, suggesting considerable effort directed towards increasing the representation of biological diversity in the reserve system and addressing earlier biases. This is consistent with the historical analysis that suggests a shift in the nature conservation motive from largely general or non-specific nature conservation in the early and middle periods to more specific nature conservation in the late period.

The representation of wilderness in the reserve system expanded enormously during the late period, despite its rapid attrition throughout the century. This correlates with the strong wilderness motive identified in the national park debates during the late period. National parks established during the early and middle periods were also largely in wilderness areas. However, the loss of wilderness in these reserves throughout time suggests that wilderness conservation was not a significant motive in the early and middle periods, as does the lack of historical evidence for such a motive.

Opposition to national parks and its impacts

While there is a high correlation between motives and their expression in the reserve system, this has been tempered by the those resisting national park creation and expansion. In Tasmania, this opposition largely came from powerful industries with

economic interests in the State's natural resources, which were backed by the government.

In the early and middle periods of reserve creation, national parks were largely established in areas then considered to be of no economic value, other than for tourism and recreation. The idea of early national parks being established in 'worthless lands' was proposed in the case of the United States, and has subsequently been applied to early national park creation in Australia, Canada and New Zealand.⁹ The evidence in the Tasmanian case also suggests that most of the national parks established during the early and middle periods were indeed in areas then considered wastelands - largely high altitude mountainous environments, unsuited to traditional forms of economic development. Similar conclusions have been reached by other authors examining different aspects of national park history in Tasmania.¹⁰ However, later reappraisal of some of these 'worthless' areas led to challenges to the security of national parks and numerous reserve revocations.

Most of the reserve revocations occurred during the middle period and the early part of the late period, when development was proceeding at a rapid pace. These revocations were largely driven by the forestry, mining and hydro-electric industries which were granted rights over Tasmania's natural resources by successive State Governments. Large areas of commercial forests were removed from Mt Field and Hartz Mountains National parks, the HEC destroyed Lake Pedder, and mining interests led to revocations in Cradle Mountain - Lake St Clair and Freycinet National Parks. Attempts made by national park supporters to prevent the invasion into reserves were unsuccessful against the politically powerful industries in the State.

Similar pressures have resulted in penetration and attrition of national parks elsewhere in the world. In the United States, for example, the Hetch Hetchy Valley was removed from Yosemite National Park and dammed in 1913 to provide a municipal water supply for San Francisco.¹¹ A hydro-electric dam was built in the 1920s in the Spray Valley in Canada's Banff National Park and

timber and mining companies operated in a number of national parks during the early days of reserve establishment in Canada.¹² In Sweden, 1 200 hectares of Stora Sjöfallet National Park was taken over for the construction of two hydro-electric power stations in 1920, resulting in the centrepiece of the reserve, the Great Waterfall, being devoid of water for most of the year. Numerous other national parks in Europe have been subject to mining or quarrying activities.¹³

New Zealand's reserves have also been vulnerable to threats from hydro-electric activities, and exploration, prospecting and mining licences have been granted in at least eight national parks.¹⁴ While small revocations of national parks have occurred in some other areas of Australia, it has been argued that reserve revocations have been more widespread and of a greater magnitude in Tasmania than in any other Australian state.¹⁵

During the late period, increasing challenges were made to the dominant developmental paradigm by conservation oriented groups and their supporters. These led to a great expansion of the reserve system and the inclusion of areas with commercial value in national parks. This was particularly the case in conflicts between conservationists and the forestry and hydro-electric industries. These resulted in some valuable water and timber resources being included in reserves, such as the Lower Gordon and Franklin Rivers, and the forests encompassed in the expansion of the World Heritage Area and the creation of Douglas-Apsley National Park.

Conservation groups and their supporters have similarly achieved some success in tempering proposed developments in other national parks around the world. For example, in New Zealand the 'Save Manapouri' campaign in 1960 stopped the level of Lake Manapouri in Fiordland National Park from being raised, while conservationists have prevented the construction of dams in Grand Canyon National Park and other reserves in the United States.¹⁶ Environmentalists in Canada blocked plans for a huge ski resort in Banff National Park in the 1970s, involving two villages, extensive entertainment and recreational developments, commercial offices

and over 2 800 parking spaces.¹⁷ However, many outcomes of conservation/exploitation conflicts have also favoured the developers or resulted in unsatisfactory compromises, particularly in the period prior to the growth of the conservation movement from the 1960s. In Tasmania it has been suggested that the development ethic has historically dominated, with successful challenges beginning only after the Lake Pedder issue in the mid-1970s.¹⁸ This is strongly supported by the findings of this thesis.

While conservationists in Tasmania have been successful in some of the hydro-electric and forestry conflicts, the mining industry has had the greatest impact in limiting the expansion of the reserve system. The creation of the World Heritage Area and subsequent additions removed the availability of significant timber and water resources to industry, but areas of mineral-bearing potential were consistently excluded from reservation, including the Mt Reid Volcanics which lie adjacent to the western boundary of the World Heritage Area. The mining lobby also managed to have mining rights granted in Douglas-Apsley National Park, a unique circumstance in Tasmania, in contravention to the provisions of the National Parks and Wildlife Act.

Oddities and novelties

While this thesis examines dominant motives and conservation themes, the stories of individual national parks in Tasmania reveal some interesting novelties and ideas. Some of these were unique to place and time, while others have been repeated in contemporary conservation and aesthetic debates.

In the early period, the repeated pushing of the tourism line led to some strange proposals by the reserve proponents. In the case of Cradle Mountain - Lake St Clair National Park, the proponents suggested that the reserve could become a tourist Mecca through the introduction of exotic flora and fauna. Red deer, chamois, trout and Northern Hemisphere conifers could ornament and enliven the area, providing sport for shooters and anglers, and pleasing scenes for the stroller. A similar inconsistency in the arguments of a

conservation group included the suggestion by the Save Lake Pedder Committee in the late 1960s that the State invest in nuclear power generation as a good alternative to hydro-electric development.

Along the theme-park line, in the debate over the provision of a tourist road to Hartz Mountains National Park in the 1950s, a Hobart resident suggested that a water-ballast funicular railway could be constructed from the terminus of the proposed road to the summit of Hartz as a draw card for visitors. A similar idea was raised in the 1990s for a cable car from a Hobart suburb to the summit of Mt Wellington. This was met with fierce opposition from local residents, conservationists and aesthetes, and there was a lack of serious interest from potential developers, as the project was not economically viable.

Another concept that reappeared in a contemporary conservation debate was the 'road to nowhere'. While the reserve proponents desperately sought continued funding for the Hartz road in the late 1930s, opponents in government described it as a 'road to nowhere' - a waste of money. The 'road to nowhere' has also been widely used to describe the road constructed during the 1990s through the 'Tarkine' wilderness in north-west Tasmania, in this case by the reserve proponents who were seeking the reservation of the area and protection from developers and the road builders.

Some of the original ideas to create national parks also emanated from some odd sources. Early moves to establish a national park in south-west Tasmania were motivated by the desire to prevent cruelty to hounds, which were being abandoned in the wild by hunters. This cause was promoted by a sympathetic and energetic Hobart woman. Similarly, the idea of a national park at Frenchmans Cap came from a Hobart dairy farmer, while the original motive behind the Maria Island reserve was to provide a refuge for the presumed extinct Tasmanian tiger. The Mt William reserve proposal came from local farmers, a group unlikely to be normally sympathetic to conservation causes, and was entwined with British Tobacco Company interests.

Most of the oddities and novelties that have appeared in the stories

of national park creation are not of major significance to the broader aims of this thesis. However, the history of national park development in Tasmania certainly contains elements of surprise and humour and potentially holds much general appeal.

Concluding Remarks

The Tasmanian national park estate has undergone a massive expansion since the first national parks were established early in the century. However, this has been marked with conflicts, which largely rose out of competing interests in resources and land use. Developers have sought to exploit the State's natural resources, a goal in which they have been strongly aided by government policies and decisions. On the other hand those concerned by this exploitation have sought to protect natural areas through the creation of secure reserves. Competing interests continue to give rise to major conflicts between conservationists and developers in Tasmania. While the development ethos is strongly entrenched in the State, Tasmania has also been the birth place of some major conservation oriented groups and a testing ground for their actions. This has had a significant impact on environmental debates and outcomes in the broader Australian context.

For example, conflicts between developers and conservationists in Tasmania led to the emergence of Australia's first green party (the United Tasmania Group) in the early 1970s, and subsequent infiltration of green ideologies into politics. The Wilderness Society, instrumental in many reserve proposals around Australia, was originally conceived in Tasmania in the mid-1970s, arising out of the Lake Pedder/south-west issue. Green Independents temporarily grasped the balance of power in State politics in the late 1980s on the conservation ticket, a unique situation in Australian political history. The incorporation of Federal politics in conservation conflicts in Tasmania also led to new definitions of the legal powers of the Federal Government in relation to environmental issues and a usurping of the powers of State Governments. All of these

outcomes ultimately resulted from the motivations and actions of the reserve proponents.

While this study has examined the development of national parks in Tasmania, changing motives, conservation themes and conflicts may have similarly influenced the development of reserve systems in other areas of the world. While the reasons behind the emergence of some national parks may be unique to time and place, it is possible that common themes exist in different settings. Most studies that have identified similarities in the way in which national parks were established in different countries have focused on early national park development. There is great scope for extension to broader time frames and scales of inquiry. There have been no other studies that have examined whether the motives of national park proponents correlate with the conservation attributes captured in reserves. This type of inquiry could be applied in any area of the world where national parks feature in the landscape.

ENDNOTES - CHAPTER 8

1. Dearden, P. and Berg, L. D., 1993. Canada's national parks: a model of administrative penetration. *The Canadian Geographer*, 37 (3), 194-211.
- Hall, C. M. and Shultis, J., 1991. Railways, tourism and worthless lands: the establishment of national parks in Australia, Canada, New Zealand and the United States. *Australian Canadian Studies*, 8 (2), 57-74.
- Laurie, M., 1979. A history of aesthetic conservation in California. *Landscape Planning*, 6, 1-49.
- Nash, R., 1982. *Wilderness and the American Mind*. Third Edition. New Haven: Yale University Press.
- Pearce, D. G. and Richez, G., 1987. Antipodean contrasts: national parks in New Zealand and Europe. *New Zealand Geographer*, 43 (2), 53-59.
- Runte, A., 1979. *National Parks: the American Experience*. Lincoln: The University of Nebraska Press.
- Runte, A., 1976. The West: wealth, wonderland and wilderness. In: Wreford Watson, J. and O'Riordan, T., (Eds.), *The American Environment: Perspectives and Policy*. John Wiley and Sons, 47-62.
2. Bardwell, S., 1974. The National Park Movement in Victoria. Unpublished PhD Thesis, Monash University, Melbourne.
- Black, A. and Breckwoldt, R., 1977. Evolution of systems of national park policy-making in Australia. In: Mercer, D., (Ed.), *Leisure and Recreation in Australia*. Sorrett Publishing, Melbourne, 190-199.
- Frawley, K., 1988. The history of conservation and the national park concept in Australia: a state of knowledge review. In: Frawley, K. and Semple, N., (Eds.), *Australia's Ever Changing Forests*. Australian Defence Force Academy, Canberra, 395-417.
- Hall, C. M., 1988. The 'worthless lands hypothesis' and Australia's national parks and reserves. In: Frawley, K. and Semple, N., (Eds.), *Australia's Ever Changing Forests*. Australian Defence Force Academy, Canberra, 441-456.
- Hall and Shultis, 1991, *op. cit.*
- Harris, S. and Whinam, J., 1993. Fenced all around - perspectives on the development of nature conservation in Tasmania. In: Moritz, C. and Kikkawa, J., (Eds.), *Conservation Biology in Australia and Oceania*. Surrey Beatty and Sons, Chipping Norton, 327-337.
- Mosley, J. G., 1969. Scenic reserve and fauna sanctuary systems in Tasmania. In: Webb, L. J., Whitelock, D. and Le Gay Brereton, J., (Eds.), *The Last of Lands*. Jacaranda Press, 161-169.

Turner, A., 1979. National Parks in New South Wales, 1979-1979: Participation, Pressure Groups and Policy. Unpublished PhD Thesis, Australian National University, Canberra.

3. Hall, 1988, *op. cit.*

4. Frawley, 1988, *op. cit.*

Mosley, G., 1978. A history of the wilderness reserve idea in Australia. In: Mosley, G., (Ed.), *Australia's Wilderness Conservation Progress and Plans*. Australian Conservation Foundation, Melbourne, 27-33.

5. Nash, 1982, *op. cit.*

Oelschläger, M., 1991. *The Idea of Wilderness*. Yale University Press.

Runte, 1979, *op. cit.*

Runte, 1976, *op. cit.*

6. Dickinson, G., 1991. National parks - Scottish needs and Spanish experience. *Scottish Geographical Magazine*, 107 (2), 124-129.

MacEwan, A. and MacEwan, M., 1983. National parks: a cosmetic conservation system. In: Warren, A. and Goldsmith, F. B., (Eds.), *Conservation in Perspective*. John Wiley and Sons, 391-409.

Pearce and Richez, 1987, *op. cit.*

Sheail, J., 1997. "Guardianship" and the "Rural Workshop" - the first quarter century of U.K. experience in nature conservation. *Journal of Environmental Management*, 50, 429-443.

Romano, B., 1995. National parks policy and mountain depopulation: a case study in the Abruzzo region of the Central Apennines, Italy. *Mountain Research and Development*, 15 (2), 121-132.

Stadel, C., Slupetzky, H. and Kremser, H., 1996. Nature conservation, traditional living space, or tourist attraction? The Hohe Tauern National Park, Austria. *Mountain Research and Development*, 16 (1), 1-16.

7. Black and Breckwoldt, 1977, *op. cit.*

Frawley, 1988, *op. cit.*

McMichael, D. F. and Gare, N. C., 1984. Keynote address: the Australian realm. In: McNeely, J. A. and Miller, K. R., (Eds.), *National Parks, Conservation and Development*. Proceedings of the World Congress on National Parks, 1982. Smithsonian Institution Press, Washington, D.C.

8. Burgman, V., 1993. *Power and Protests: Movements for Change in Australian Society*. Allen and Unwin, London.

Heathcote, R. L., 1975. *Australia*. Longman, London.

Heathcote, R. L., 1972. The visions of Australia 1770-1970. In: Rapoport, A., (Ed.), *Australia as Human Setting*. Angus and Robertson, Sydney, 77-98.

- Hutton, D. and Connors, L., 1999. *A History of the Australian Environment Movement*. Cambridge University Press.
- Frawley, K., 1992. A green vision: the evolution of Australian environmentalism. In: Anderson, K. and Gale, F., (Eds.), *Inventing Places*. Longman Cheshire, Melbourne, 215-234.
9. Hall, 1988, *op. cit.*
- Hall and Shultis, 1991, *op. cit.*
- Runte, 1979, *op. cit.*
- Runte, 1976, *op. cit.*
10. Castles, G., 1986. Handcuffed Volunteers. A History of the Scenery Preservation Board in Tasmania, 1915-1971. Unpublished Honours Thesis, University of Tasmania.
- Harris and Whinam, 1993, *op. cit.*
- Mosley, 1969, *op. cit.*
- Mosley, G., 1966. Aspects of the Geography of Recreation in Tasmania. Unpublished PhD Thesis, Australian National University, Canberra.
11. Runte, 1976, *op. cit.*
12. Dearden and Lawrence, 1993, *op. cit.*
13. Pearce and Richez, 1987, *op. cit.*
14. *Ibid.*
15. Mercer, D. and Peterson, J., 1986. The revocation of national parks and equivalent reserves in Tasmania. *Search*, 17 (5-6), 134-140.
16. Pearce and Richez, 1987, *op. cit.*
17. Dearden and Lawrence, 1993, *op. cit.*
18. Kirkpatrick, J. B., 1988. Heritage and development in Tasmania. *Australian Geographer*, 19, 46-63.
- Frawley, 1988, *op. cit.*

Bibliography

Archives Office of Tasmania

Scenery Preservation Board: Minutes of Meetings, 1917-1970
Correspondences, 1917-1970

National Park Board: Minutes of Meetings, 1917-1947

Cradle Mountain Reserve Board: Minutes of Meetings, 1930-1947

Animals and Birds Protection Board: Minutes of Meetings, 1960-1970

The Meredith Papers.

Records Office, Department of Primary Industry, Water and the Environment

File No. 500553 (Maria Island National Park)

File No. 500423R (Asbestos Range National Park)

File No. 501799 (Mt William National Park)

Newspapers

The Advocate

The Age

The Australian

The Daily Post

The Examiner

The Huon and Derwent Times

The Huon News

The Mercury

The National Times

The Tribune

The Weekend Australian

The Weekly Courier

Interviews

Dr Eric Guiler, Chairman of the Animals and Birds Protection Board (1960s), 11/3/1999.

Mrs Jessie Luckman, Hobart Walking Club (1936-), 10/9/1998.

Professor Jamie Kirkpatrick, School of Geography and Environmental Studies, University of Tasmania, 16/10/1998.

Parliamentary Acts, Bills and Papers (Tasmanian)

1863	27 Vic. No. 22	<i>The Waste Lands Act</i>
1899	No. 64	<i>Reserves for Recreation Grounds etc.</i>
1903	3 Edw. VII No. 39	<i>The Crown Lands Act</i>
1911	2 Geo. V No. 64	<i>The Crown Lands Act</i>
1915	6 Geo. V No. 15	<i>The Scenery Preservation Act</i>
1919	No. 14	<i>National Park Board Report for 1918-1919.</i>
1921	12 Geo. V No. 29	<i>An Act to Amend the Scenery Preservation Act</i>
1928	19 Geo. V No. 51	<i>The Animals and Birds Protection Act</i>
1932	23 Geo. V No. 10	<i>Florentine Valley Wood Pulp and Paper Act</i>
1935	26 Geo. V No. 27	<i>Florentine Valley Paper Industry Act</i>
1945	No. 42	<i>Report on the Forests and Forestry Administration in Tasmania</i>
1949	No. 5	<i>National Park and Florentine Valley Bill</i>

1950	No. 37	<i>National Park and Florentine Valley Bill</i>
1950	No. 71	<i>National Park and Florentine Valley Act</i>
1961	No. 48	<i>Wesley Vale Pulp and Paper Industry Act</i>
1967	No. 25	<i>Gordon River and Thermal Power Development. Report of the Select Committee of the Legislative Council</i>
1968	No. 71	<i>Pulpwood Products Industry (Eastern and Central Tasmania) Act</i>
1970	No. 48	<i>The National Parks and Wildlife Act</i>
1971	No. 37	<i>Scenery Preservation Board Annual Report</i>
1972	No. 31	<i>The North East Land Development Act</i>

Parliamentary Acts and Papers (Federal)

1974	No. 104	<i>Final Report of the Lake Pedder Committee of Inquiry on the Flooding of Lake Pedder</i>
1974	No. 151	<i>States Grants (Nature Conservation) Act</i>
1974	No. 195	<i>The National Estate: Report of the Committee of Inquiry (Hope Committee)</i>
1977	No. 150	<i>Environment (Financial Assistance) Act</i>
1983	No. 5	<i>World Heritage Properties Conservation Act</i>

1987 No. 13 *Lemonthyme and Southern
Forests (Commission of Inquiry)
Act*

Theses and unpublished material

Australian Conservation Foundation, 1975. Submission to the South-West Advisory Committee on the Southwest National Park Draft Management Plan.

Australian Conservation Foundation, 1976. Submission to the South-West Advisory Committee on the Southwest National Park Draft Management Plan.

Australian Paper Manufacturers, 1975. Submission to the South-West Advisory Committee on the Southwest National Park Draft Management Plan.

Bardwell, S., 1974. The National Park Movement in Victoria. PhD Thesis, Monash University, Melbourne.

Byers, M., 1996. Tourism and Bushwalking in the Cradle Mountain - Lake St Clair National Park: Context, Characteristics and Impacts. Master of Environmental Studies Thesis, University of Tasmania.

Castles, G., 1986. Handcuffed Volunteers. A History of the Scenery Preservation Board in Tasmania, 1915-1971. Honours Thesis, University of Tasmania.

Davis, B. W., 1981. Characteristics and Influence of the Australian Conservation Movement: An Examination of Selected Conservation Controversies. PhD Thesis, University of Tasmania.

H. Jones and Co. Pty Ltd, 1975. Submission to the South-West Advisory Committee on the Southwest National Park Draft Management Plan.

Jetson, T., 1987. The Roof of Tasmania. The History of the Central Plateau. Master of Arts Thesis, University of Tasmania.

MacPhie, P., 1992. Mt Field. The Evolution of Tasmania's First National Park, 1830-1960. Department of Parks, Wildlife and Heritage, Tasmania (draft only).

Mineral Holdings Australia Pty Ltd, 1975. Submission to the South-West Advisory Committee on the Southwest National Park Draft Management Plan.

Mosley, G., 1966. Aspects of the Geography of Recreation in Tasmania. PhD Thesis, Australian National University, Canberra.

National Parks and Wildlife Service, 1971. Maria Island - Case for Proclamation as a State Reserve.

National Parks and Wildlife Service, 1976. Submission to the South-West Advisory Committee on the Southwest National Park Draft Management Plan.

Shepherd, R., Winkler, C. and Jones, R., 1975. Management of the Central Plateau of Tasmania as a Conservation Area. Paper presented at a symposium on Management of Terrestrial Ecosystems, Ecological Society of Australia, Brisbane, May 1975.

South-West Advisory Committee, 1976. Submissions to the South-West Advisory Committee on the Southwest National Park Draft Management Plan.

Tasmanian Conservation Trust, 1972. The New River/Precipitous Bluff Area. A report to the Federal Minister for the Environment, Tasmanian Conservation Trust.

Tasmanian Timber Association, 1975. Submission to the South-West Advisory Committee on the Southwest National Park Draft Management Plan.

The Geeveston Branch of the Tasmanian Field and Game Association, 1975. Submission to the South-West Advisory Committee on the Southwest National Park Draft Management Plan.

The South-West Advisory Committee, 1976. Submissions to the South-West Advisory Committee on the Southwest National Park Draft Management Plan.

The South-West Committee, 1966. Submission covering conservation and development of south-west Tasmania.

Turner, A., 1979. National parks in New South Wales, 1979-1979: Participation, Pressure Groups and Policy. PhD Thesis, Australian National University, Canberra.

Maps

Department of Tourism, Sport and Recreation, 1994. *Visitors Map of Tasmania*. Department of Environment and Land Management.

Government Tourist Bureau, 1916. *Tourist Map of Tasmania*. Sheets 1-2, Archives Office of Tasmania.

Government Tourist Bureau, 1937. *Tourist Map of Tasmania*. Sheets 1-2, Archives Office of Tasmania.

Kirkpatrick, J. B. and Dickinson, K. L. M., 1984. *Vegetation of Tasmania*. Forestry Commission Tasmania.

Kirkpatrick, J.B. and Brown, M.J, 1991. *Forest Vegetation of Tasmania*. Forestry Commission, Tasmania.

Land Information Bureau, 1994. *Tasmania*. Sheets 1-4, Second Edition. Department of Environment and Land Management, Hobart.

Surveyor-General's Office, Hobart, 1970. *Tasmania*. Sheets 1-8. Archives Office of Tasmania.

Surveyor-General's Office, Hobart, c1940-1950. *Tasmania*. Sheets 1-4. Archives Office of Tasmania.

Tasmania-Commonwealth Regional Forest Agreement, 1996. *Tasmania Comprehensive Regional Assessment. Forest Communities - Current Extent*. Tasmanian Public Land Use Commission.

Brochures and miscellaneous items

Flagg, c1990s. *Tasmania, Australia* (brochure).

Kirkpatrick, J. B. *Refugia Database*. Department of Geography and Environmental Studies, University of Tasmania (database).

Media Release, 15/9/1989. Senator Graham Richardson, Minister for the Arts, Sport, the Environment, Tourism and Territories.

Morton, C. E., 1899. *Tourists Guide to Tasmania* (2nd Edn.). Union Line of Steamers, The Mercury Office, Hobart (brochure).

National Parks and Wildlife Service, (undated). *Mt William National Park*. National Parks and Wildlife Service, Sandy Bay, Tasmania (brochure).

National Parks and Wildlife Service, 1986. *Asbestos Range National Park*. National Parks and Wildlife Service, Sandy Bay, Tasmania (brochure).

National Parks and Wildlife Service, c1970. *Tasmania's National Parks and Historic Sites*. National Parks and Wildlife Service, Tasmania (brochure).

Postcards c1930s. *Souvineer of Tasmania. Queenstown, Gordon River e.t.c. West Coast of Tasmania*. Spurlings Pty. Ltd., Launceston.

Postcards, 1940-1970. *Scenic Postcards of Tasmania*.

Postcard Series, c1910. *Souvineer of Tasmania and Views of Hobart and Southern Tasmania.*

Pringle-Jones, J., 1981. *Discovering Tasmania: Australia's Holiday Wonderland.* Decalon Pty. Ltd. (brochure).

Royal Automobile Club of Tasmania, c1960s. *Highway Guide to Tasmania* (brochure).

State Executive Committee c1920s/1930s *Come to Tasmania* (brochure).

Tasmania Tourism Department, c1990s. *Tasmania* (brochure).

Tasmanian Government Tourist Bureau, 1983/1984. *Tasbureau's Tasmania.* Acting Government Printer in Tasmania (brochure).

Tasmanian Government Tourist Bureau, c1960s. *Tasmanian Holiday.* Mercury-Walsh (brochure).

Tasmanian Government Tourist Bureau, c1930s *Tasmania. The Wonderland.* Government Printer, Tasmania (brochure).

Tasmanian Government Tourist Bureau, c1930s. *National Park Tasmania* (brochure).

Tasmanian Government Tourist Bureau, Hobart, c1930s. *Tasmania for your Holidays.* The Lady Publishing Co. Pty. Ltd. (brochure).

Tasmanian Government Tourist Department, c1920s. *Tasmania. Australia's Playground.* John Vail, Government Printer, Tasmania (brochure).

Tasmanian Government, 1987. *Tasmania: Be Tempted* (brochure).

Tasmanian Government, c1940s/1950s. *Tasmania. Gem of the South.* L. G. Shea, Government Printer, Tasmania (brochure).

Tasmanian Government, c1940s/1950s. *This is Tasmania*. L. G. Shea, Government Printer, Tasmania (brochure).

Tasmanian Government? c1940s. *Tasmania. The Isle of Scenic Beauty*. Nucolorvue Productions. Mentone, Victoria (brochure).

Tasmanian Government, 1937. *Tasmania. The Jewel of the Commonwealth*. Critchley Parker (brochure).

Tasmanian Government?, 1935. *Tasmania's Colour-Line Tours*. Government Printer, Tasmania (brochure).

Tasmanian Tourism Department, 1996. *Tasmanian Expeditions, Australia*. (brochure).

Tasmanian Tourism Department, c1990s. *Tasmania: The Outdoor Experience*. (brochure).

Tasmanian Tourism Department, c1990s. *Tasmania's West Coast: Wild, Magnificent...and Yours* (brochure).

Tasmanian Tourist Association, 1908-1909. *Just the Thing for Tourists to Hobart, Tasmania* (Eighth Edition). Tasmanian News (brochure).

Tasmanian Tourist Association, 1906-1907. *Just the Thing for Tourists to Hobart, Tasmania* (Sixth Edition). Tasmanian News (brochure).

Tasmanian Tourist Association, Hobart, Southern Tasmania, c1920s. *Beautiful Tasmania*. John Vail, Government Printer (brochure).

Tasmanian Tourist Association, Hobart, 1913-1914. *Tasmania for the Tourist*. Cox Print, Hobart (brochure).

Tasmanian Tourist Bureau, 1990-1991. *Tasmania Visitors Guide* (brochure).

Tasmanian Tourist Department, c1940s. *Tasmania Holiday Island. For Holidays all the Year Round* (brochure).

Tasmanian Tourist Promotion Council, Hobart, c1940s/1950s. *No Other Country in the World is Quite Like Tasmania*. Mirror Newspapers Ltd (series of newspaper clippings).

The Wilderness Society (undated). The proposed Douglas-Apsley National Park (brochure).

Unknown author, pre-1900. *Tasmanian Views* (booklet).

Published material

Angus, M., 1975. *The World of Olegas Truchanas*. The Olegas Truchanas Publication Committee, Hobart.

Ashton, J. R., 1972. Water resources and power development on the Central Plateau. In: Banks, M. R., (Ed.), *The Lake Country*. A symposium conducted by the Royal Society of Tasmania at Poatina, Tasmania, November 11-12, 1972, 183-192.

Australian Conservation Foundation, 1972. *Pedder Papers. Anatomy of a Decision*. Australian Conservation Foundation, Melbourne.

Australian Conservation Foundation, 1969. *The High Country*. Viewpoint Series 4. Australian Conservation Foundation, Melbourne.

Banks, M. R., (Ed.), 1972. *The Lake Country*. A symposium conducted by the Royal Society of Tasmania at Poatina, Tasmania, November 11-12, 1972.

Barrett, C., 1944. *Isle of Mountains: Roaming Through Tasmania*. Cassell and Co. Ltd, Melbourne.

Beattie, J. W., 1908. Notes on the River Gordon and on the need for reservation of land along its banks. *Papers and Proceedings of the Royal Society of Tasmania*, 1908, 31-35.

Beatty, B., 1967. *Tasmania: Isle of Splendour*. Cassell Australia Ltd., Melbourne.

Bergman, 1959. *Gustav Weindorfer of Cradle Mountain*. Mercury Press, Hobart, Tasmania.

Bishop, I. D. and Hulse, D. W., 1994. Prediction of scenic beauty using mapped data and geographic information systems. *Landscape and Urban Planning*, 30, 59-70.

Bishop, I.D. and Leahy, P.N.A., 1989. Assessing the visual impact of development proposals: the validity of computer simulations. *Landscape Journal*, 8, 92-100.

Black, A. and Breckwoldt, R., 1977. Evolution of systems of national park policy-making in Australia. In: Mercer, D., (Ed.), *Leisure and Recreation in Australia*. Sorrett Publishing, Melbourne, 190-199.

Blankson, E. J. and Green, B. H., 1991. Use of landscape classification as an essential prerequisite to landscape evaluation. *Landscape and Urban Planning*, 21, 149-162.

Boden, R. and Baines, G., 1981. National parks in Australia - origins and future trends. In: Mercer, D., (Ed.), *Outdoor Recreation - Australian Perspectives*. Sorrett Publishing, Melbourne, 148-155.

Branagan, J. G., 1984. *A Great Tasmanian*. Frederick Smithies, O. B. E. Royal Press, Launceston, Tasmania.

Brogden, S., 1949. *Tasmanian Journey*. Morris and Walker Pty. Ltd., Melbourne.

Burgmann, V., 1993. *Power and Protests: Movements for Change in Australian Society*. Allen and Unwin, London.

Burnett, G. W. and Butler Harrington, L. M., 1994. Early national park adoption in Sub-Saharan Africa. *Society and Natural Resources*, 7 (2), 155-168.

Carruthers, J., 1997. Nationhood and national parks: comparative examples from the post-imperial experience. In: Griffiths, T. and Robin, L., (Eds.), *Ecology and Empire: Environmental History in Settler Societies*. Melbourne University Press, Victoria, 125-138.

Cogger, H. G., 1994. Biodiversity conservation in Australia: development of a national strategy. In: Moritz, C. and Kikkawa, T., (Eds.), *Conservation Biology in Australia and Oceania*. Surrey Beatty and Sons Pty Ltd, NSW, 297-304.

Connolly, B., 1981. *Fight for the Franklin. A story of Australia's Last Wild River*. Cassell Australia Ltd, NSW and Victoria.

Cook, P.S. and Cable, T.T., 1995. The scenic beauty of shelterbelts on the Great Plains. *Landscape and Urban Planning*, 32, 63-69.

Cordes, D. D., 1983. *The Park at Belair*. Island Press, Kingscote.

Costin, A. B., 1972. Characteristics and use of Australian high country. In: Banks, M. R., (Ed.), *The Lake Country*. A symposium conducted by the Royal Society of Tasmania at Poatina, Tasmania, November 11-12, 1972, 1-23.

Council of Nature Conservation Ministers, 1985. *Identification and Management of Wilderness Areas in Australia*. Department of Arts, Heritage and Environment, Canberra.

Country Women's Association in Tasmania, 1961. *Tasmania. This Lovely Isle*. (Publisher unknown).

Coy, R, Greenslade, P. and Rounsevell, D., 1993. A survey of invertebrates in Tasmanian rainforest. *Tasmanian NRCP Technical*

Report No. 9. Parks and Wildlife Service, Tasmania, and Department of Arts, Sport, the Environment and Territories, Canberra.

Daniel, T.C. and Bolster, R.S., 1976. Measuring landscape aesthetics: the scenic beauty estimation method. *US Forest Service Resource Paper*, RM-167.

Dargavel, J., 1984. Pulp and paper monopolies in Tasmania. In: Taylor, M. (Ed.), *A Geography of Australian Corporate Power*, 69-89.

Davis, B. W. and Gee, H. M., 1983. The South-West Advisory Committee. In: Gee, H. and Fenton, J., 1983. *The South West Book*. Third Edition. Collins, Sydney and the Australian Conservation Foundation, Melbourne, 255-256.

Dearden, P. and Berg, L. D., 1993. Canada's national parks: a model of administrative penetration. *The Canadian Geographer*, 37 (3), 194-211.

Department of Environment and Land Management, 1993. *Annual Report, 1992-1993*. Department of Environment and Land Management, Tasmania.

Department of Parks, Wildlife and Heritage, 1992. *Douglas-Apsley National Park. Draft Management Plan*. Department of Parks, Wildlife and Heritage, Tasmania.

Department of the Arts, Sport, the Environment, Tourism and Territories, 1988. *Report of the Commission of Inquiry into the Lemonthyme and Southern Forests. Volume 1*. Australian Government Publishing Service, Canberra.

Dickinson, G., 1991. National parks - Scottish needs and Spanish experience. *Scottish Geographical Magazine*, 107 (2), 124-129.

Dombrovskis, P., 1988. *Wilderness Diary*. West Wind Press, Tasmania.

Dombrovskis, P., 1990. *Wilderness Diary*. West Wind Press, Tasmania.

- Dombrovskis, P., 1991. *Wilderness Diary*. West Wind Press, Tasmania.
- Dombrovskis, P., 1992. *Wilderness Diary*. West Wind Press, Tasmania.
- Dombrovskis, P., 1993. *Wilderness Diary*. West Wind Press, Tasmania.
- Dombrovskis, P., 1994. *Wilderness Diary*. West Wind Press, Tasmania.
- Dombrovskis, P., 1995. *Wilderness Diary*. West Wind Press, Tasmania.
- Dombrovskis, P., 1996. *Wilderness Diary*. West Wind Press, Tasmania.
- Dragun, A. K., 1983. Hydroelectric development and wilderness conflict in South-West Tasmania. *Environmental Conservation*, 10, 197-204.
- Duncan, F. and Brown, M. J., 1985. Dry Sclerophyll Vegetation in Tasmania. *Wildlife Division Technical Report 86/2*. National Parks and Wildlife Service, Tasmania.
- Duncan, F., 1983. Plant Communities of the Douglas River Region. *Wildlife Division Technical Report 83/3*. National Parks and Wildlife Service, Tasmania.
- Emmett, E. T., 1954. *Tasmania by Road and Track*. Cambridge University Press.
- Feller, M., Hooley, D., Dreher, T., East, I., and Jung, R., 1979. *Wilderness in Victoria: An Inventory*. Monash Publications in Geography No. 21, Department of Geography, Monash University.
- Fensham, R. J. and Kirkpatrick, J. B., 1989. The conservation of original vegetation remnants in the Midlands, Tasmania. *Papers and Proceedings of the Royal Society of Tasmania*, 123, 229-246.
- Fensham, R. J., 1989. The pre-European vegetation of the Midlands, Tasmania: a floristic and historical analysis of vegetation patterns. *Journal of Biogeography*, 16, 29-45.

Fernie, L. and Fernie, G., 1989. *In Praise of a National Park: The Origins of the Walpole-Nornalup National Park*. Lee and Geoff Fernie, Western Australia.

Fines, K. D., 1968. Landscape evaluation: a research project in East Sussex. *Regional Studies*, 2 (1), 41-45.

Flanagan, R., 1985. *A Terrible Beauty. History of the Gordon River Country*. Greenhouse Publications Pty Ltd, Victoria, Australia.

Frawley, K., 1992. A green vision: the evolution of Australian environmentalism. In: Anderson, K. and Gale, F., (Eds.), *Inventing Places*, Longman Cheshire, Melbourne, 215-234.

Frawley, K., 1988. The history of conservation and the national park concept in Australia - a state of knowledge review. In: Frawley, K. and Semple, N., (Eds.), *Australia's Ever Changing Forests*. Australian Defence Force Academy, Canberra, ACT, 395-417.

Gee, H. and Fenton, J. (Eds.), 1983. *The South West Book*. Third Edition. Collins, Sydney and the Australian Conservation Foundation, Melbourne.

Gee, H. M., 1983. The evolving consciousness. In: Gee, H. and Fenton, J., (Eds.), *The South West Book*. Third Edition. Collins, Sydney and the Australian Conservation Foundation, Melbourne, 239-250.

Giordana, M., 1987. *A Man and a Mountain. The Story of Gustav Weindorfer*. Regal Publications, Launceston, Tasmania.

Goldstein, W., (Ed.), 1979. *Australia's 100 Years of National Parks*. National Parks and Wildlife Service, New South Wales, Sydney.

Gotmark, F. and Nilsson, C., 1992. Criteria used for protection of natural areas in Sweden 1909-1986. *Conservation Biology*, 6 (2), 220-231.

Green, R., 1981. *Battle for the Franklin. Conversations with the Combatants in the Struggle for South West Tasmania*. Australian Conservation Foundation, Melbourne.

Hall, C. M. and Shultis, J., 1991. Railways, tourism and worthless lands: the establishment of national parks in Australia, Canada, New Zealand and the United States. *Australian Canadian Studies*, 8 (2), 57-74.

Hall, C. M., 1987. Wilderness inventories in Australia. *Readings in Australian Geography*. Proceedings of the 21st Institute of Australian Geographers' Conference, Perth, 1986. Institute of Australian Geographers (WA Branch) and Department of Geography, University of Western Australia.

Hall, C. M., 1988. The 'worthless lands hypothesis' and Australia's national parks and reserves. In: Frawley, K. J. and Semple, N., (Eds.), *Australia's Ever Changing Forests*. Australian Defence Force Academy, Canberra, ACT, 441-456.

Harris, S. and Whinam, J., 1994. Fenced all around - perspectives on the development of nature conservation in Tasmania. In: Moritz, C. and Kikkawa, J. (Eds.), *Conservation in Australia and Oceania*. Surrey Beatty and Sons Pty Ltd, NSW, 327-335.

Harwood, C., 1983. The Precipitous Bluff-Hartz swap. In: Gee, H. and Fenton, J., 1983. *The South West Book*. Third Edition. Collins, Sydney and the Australian Conservation Foundation, Melbourne, 203.

Hawes, M. and Heatley, D., 1985. *Wilderness Assessment and Management*. A Discussion Paper, Wilderness Society, Hobart.

Hawksworth, D. L., (Ed.), 1995. *Biodiversity. Measurement and Estimation*. The Royal Society and Chapman and Hall.

Heathcote, R. L., 1972. The visions of Australia 1770-1970. In: Rapoport, A., (Ed.), *Australia as Human Setting*. Angus and Robertson, Sydney, 77-98.

Heathcote, R. L., 1975. *Australia*. Longman, London.

Helman, P. H., Jones, A. D., Pigram, J. J. J. and Smith, J. M. B., 1976. *Wilderness in Australia. Eastern New South Wales and South East Queensland*. Department of Geography, University of New England, Armidale, NSW.

Heyn, W., 1901. Present and future prospects of timber in Tasmania. *Papers and Proceedings of the Royal Society of Tasmania*, 1900-1901, 21-37.

Hitchcock, R. K., 1995. Centralisation, resource depletion, and coercive conservation among the Tyua of the northeastern Kalahari. *Human Ecology*, 23 (2), 169-198.

Hurley, F., 1953. *Tasmania: A Glance at its History, Beauty, Resources and Development Over a Period of 150 years*. John Sands Pty. Ltd., Sydney.

Hutton, D. and Connors, L., 1999. *A History of the Australian Environment Movement*. Cambridge University Press.

Jackman-Muir, J. H., 1982. *Serpentine National Park: A Brief History*. National Parks Authority, Perth.

Jackson, W. D., 1972. Vegetation of the Central Plateau. In: Banks, M. R., (Ed.), *The Lake Country*. A symposium conducted by the Royal Society of Tasmania at Poatina, Tasmania, November 11-12, 1972, 61-85.

Jacobs, P., 1998. Mount Buffalo National Park: an historical perspective. *The Victorian Naturalist*, 115 (5), 245-254.

Jones, D., (Ed.), 1972. *Lake Pedder. Why a National Park Must be Saved*. The Griffin Press, Adelaide.

Jones, D., 1981. Politicians have come to think that anything goes. In: Green, R., *Battle for the Franklin. Conversations with the Combatants*

in the Struggle for South West Tasmania. Australian Conservation Foundation, 50-68.

Kaplan, S., Kaplan, R. and Wendt, J. S., 1972. Rated preference and complexity for natural and urban visual material. *Perception Psychophysics*, 12, 354-365.

Kiernan, K., 1981. All over the bloody floor were stone tools and I had just never noticed. In: Green, R., *Battle for the Franklin. Conversations with the combatants in the Struggle for South West Tasmania.* Australian Conservation Foundation, Melbourne, 82-99.

Kirkpatrick, J. B., 1988. Heritage and development in Tasmania. *Australian Geographer*, 19, 46-63.

Kirkpatrick, J. B., 1979. *Hydro-electric development and wilderness.* Report to the Department of Environment, attachment to: *Assessment of the HEC Report on the Lower Gordon River Development Stage Two.* Department of the Environment, Hobart.

Kirkpatrick, J. B. and Haney, R. A., 1980. The quantification of developmental wilderness loss: the case of forestry in Tasmania. *Search*, 11 (10), 331-335.

Kirkpatrick, J. B. and Moscal, A. and Brown, M. J., 1980. *Threatened Plants of the Central East Coast.* Tasmanian Conservation Trust, Hobart.

Kirkpatrick, J. B., Barker, P., Brown, M. J., Harris, S. and Mackie, R., 1995. The reservation status of Tasmanian vascular plant communities. *Wildlife Scientific Report 95/4.* Parks and Wildlife Service, Tasmania.

Knight, A. W., 1967. Gordon River Road. *Hydro News.* April-June, 1967.

Land Conservation Council, 1990. *Wilderness. Special Investigation Descriptive Report.* Melbourne, Victoria.

Lands Department, 1978. *Management Plan for the Central Plateau Protected Area*. Lands Department, Hobart.

Lands Department, 1976. *Management Plan for the Central Plateau Protected Area*. Lands Department, Hobart.

Laurie, M., 1979. A history of aesthetic conservation in California. *Landscape Planning*, 6, 1-49.

Lawrence, M. J., 1979. *Environmental Impact Statement for Oakleigh Creek Wolframite Project*. Central Tasmanian Tungsten Pty Ltd.

Lesslie, R., 1991. Wilderness survey and evaluation in Australia. *Australian Geographer*, 22, 35-43.

Lesslie, R. G. and Taylor, S. G., 1985. The wilderness continuum concept and its implications for wilderness preservation policy. *Biological Conservation*, 32, 309-333.

Lesslie, R. G. and Taylor, S. G., 1983. *Wilderness in South Australia*. Centre for Environmental Studies Occasional Paper No. 1, Centre for Environmental Studies, University of Adelaide.

Lesslie, R. G., Mackey, B. G. and Preece, K. M., 1988. A computer-based method for the evaluation of wilderness. *Environmental Conservation*, 15 (3), 33-43.

Lesslie, R. G., Mackey, B. G. and Shulmeister, J., 1988. *Wilderness Quality in Tasmania*. Australian Heritage Commission, Canberra.

Lesslie, R. G., Taylor, D. and Maslen, M., 1993. *National Wilderness Inventory: Handbook of Principles, Procedures and Usage*. Australian Heritage Commission, Canberra.

Lewis, A. N., 1921. A preliminary sketch of the glacial remains preserved in the National Park of Tasmania. *Papers and Proceedings of the Royal Society of Tasmania*, 1922, 17-36.

- Linton, D. L., 1968. The assessment of scenery as a natural resource. *Scottish Geographical Magazine*, 84, 119-238.
- Lord, C. E., 1918. The foundation of the National Park. *Papers and Proceedings of the Royal Society*, 1918, 74-75.
- Lowe, D., 1984. *The Price of Power*. The MacMillan Company of Australia Pty Ltd.
- Lowe, P. and Goyder, J., 1983. *Environmental Groups in Politics*. George Allen and Unwin, Sydney.
- Lucas, P. H. C., 1984. How protected areas can help meet society's evolving needs. In: McNeely, J. A. and Miller, K. R., (Eds.), *National Parks, Conservation and Development*. Proceedings of the World Congress on National Parks and Protected Areas. Smithsonian Institution Press, Washington, DC, 72-77.
- MacEwan, A. and MacEwan, M., 1983. National parks: a cosmetic conservation system. In: Warren, A. and Goldsmith, F. B., (Ed.), *Conservation in Perspective*. John Wiley and Sons, 391-409.
- McMichael, D. F. and Gare, N. C., 1984. Keynote address: the Australian realm. In: McNeely, J. A. and Miller, K. R., (Eds.), *National Parks, Conservation and Development*. Proceedings of the World Congress on National Parks, 1982. Smithsonian Institution Press, Washington DC.
- McNeely, J. A., (Ed.), 1992. *Parks for Life*. Report of the Fourth World Congress on National Parks and Protected Areas. IUCN and WWF.
- McNeely, J. A., Miller, K. R., Reid, W. V., Mittermeier, R. A. and Werner, T. B., 1990. *Conserving the World's Biological Diversity*. IUCN, WRI, CI, WWF-US, the World Bank, Gland Switzerland and Washington DC.
- Mendel, L. C. and Kirkpatrick, J. B., 1999. Assessing temporal changes in the reservation of the natural aesthetic resource using pictorial content

analysis and a grid-based scoring system - the example of Tasmania, Australia. *Landscape and Urban Planning*, 43 (4), 181-190.

Mendel, L. and Kirkpatrick, J. B., 1994. *The Environmental Values of Reserves Under the Crown Lands Act 1976*. A Report to the Public Land Use Commission. Department of Geography and Environmental Studies, University of Tasmania.

Mercer, D., 1991. *A Question of Balance*. The Federation Press, NSW.

Mercer, D. and Peterson, J., 1986. The revocation of national parks and equivalent reserves in Tasmania. *Search*, 17, (5-6), 134-140.

Michaels, K. and Mendel, L., 1998. Carabid beetle and vegetation associations in the Tasmanian Eastern Tiers: implications for conservation. *Pacific Conservation Biology*, 4 (3), 240-249.

Miller, K. R., 1984. The natural protected areas of the world. In: McNeely, J. A. and Miller, K. R., (Eds.), *National Parks, Conservation and Development*. Proceedings of the World Congress on National Parks and Protected Areas. Smithsonian Institution Press, Washington, DC, 20-23.

Mosley, G., (Ed.), 1978. *Australia's Wilderness Conservation and Progress*. Fontana and Australian Conservation Foundation, Melbourne.

Mosley, G., 1978. A history of the wilderness reserve idea in Australia. In: Mosley, G., (Ed.), *Australia's Wilderness Conservation and Progress*. Australian Conservation Foundation, Canberra, 27-33.

Mosley, J. G., 1969. Scenic reserve and fauna sanctuary systems in Tasmania. In: Webb, L. J., Whitelock, D. and LeGay, J., (Eds.), *The Last of Lands*. Jacaranda Press, 161-169.

Mosley, G., 1966. The Tasmanian national park system. *Tasmanian Tramp*, 17, 43-49.

Mosley, J. G. and Messer, J., (Eds.), 1984. *Fighting for Wilderness*. Fontana and Australian Conservation Foundation, Melbourne.

Nash, R., 1982. *Wilderness and the American Mind*. Third Edition. New Haven: Yale University Press.

Nash, R., 1970. The American invention of national parks. *American Quarterly*, 23 (3), 726-735.

National Parks and Wildlife Service, 1979. *A Proposal for a Wild River National Park: The Franklin-Lower Gordon Rivers*. A submission to the Minister for National Parks and Wildlife, National Parks and Wildlife Service, Tasmania.

National Parks and Wildlife Service, 1975. *Draft Management Plan for the Southwest National Park Tasmania*. National Parks and Wildlife Service, Tasmania.

National Parks and Wildlife Service, 1971. *Maria Island National Park*. National Parks and Wildlife Service, Sandy Bay, Tasmania.

National Parks and Wildlife Service, (undated). *An Invitation: Help Plan the Future Management of Tasmania's World Heritage Area*. National Parks and Wildlife Service, Sandy Bay, Tasmania.

Neumann, R. P., 1996. Dukes, earls, and ersatz Edens: aristocratic nature preservationists in colonial Africa. *Environment and Planning D: Society and Space*, 14, 79-98.

Nillson, C. and Gotmark, F., 1992. Protected areas in Sweden: is natural variety adequately represented? *Conservation Biology*, 6 (2), 232-242.

Oelschlaeger, M., 1991. *The Idea of Wilderness*. Yale University Press.

Ovington, J. D., 1980. The parks: a national perspective. In: Messer, J. and Mosley, J. G., (Eds.), *The Value of National Parks to the Community*. Australian Conservation Foundation, Melbourne, 45-56.

- Parks and Wildlife Service, Tasmania, 1999. *Tasmanian Wilderness World Heritage Area Management Plan 1999*. Parks and Wildlife Service, Tasmania.
- Pearce, D. G. and Richez, G., 1987. Antipodean contrasts: national parks in New Zealand and Europe. *New Zealand Geographer*, 43 (2), 53-59.
- Peluso, N. L., 1993. Coercing conservation? The politics of state resource control. *Global Environmental Change*, 3 (2), 199-217.
- Porter, G., (undated, c1920s/1930s). *Wanderings in Tasmania*. Selwyn and Blout Ltd.
- Pouliquen-Young O., 1997. Evolution of the system of protected areas in Western Australia. *Environmental Conservation*, 24 (2), 168-181.
- Reece, E., 1981. God gave us the earth to use and care for. In: Green, R., *Battle for the Franklin. Conversations with the combatants in the Struggle for South West Tasmania*. Australian Conservation Foundation, Melbourne, 26-38.
- Ribe, R.G., 1986. A test of uniqueness and diversity visual assessment factors using judgement-independent measures. *Landscape Resources*, 11 (2), 13-15.
- Robson, L., 1991. *A History of Tasmania. Volume Two*. Oxford University, Melbourne.
- Rodway, L., 1899. Forestry for Tasmania. *Papers and Proceedings of the Royal Society of Tasmania*, 1898-1899, liii-xliv.
- Romano, B., 1995. National parks policy and mountain depopulation: a case study in the Abruzzo region of the Central Apennines, Italy. *Mountain Research and Development*, 15 (2), 121-132.
- Rowland, J., 1958. *Tasmania Yesterday and Today*. MacMillan and Co. Ltd.

Runte, A., 1976. The West: wealth, wonderland and wilderness. In: Wreford Watson, J. and O'Riordan, T., (Eds.), *The American Environment: Perceptions and Policies*. John Wiley and Sons, 47-62.

Runte, A., 1979. *National Parks: the American Experience*. Lincoln: The University of Nebraska Press.

Russell, J. A., Matthews, J. H. and Jones, R., 1979. *Wilderness in Tasmania*. A Report to the Australian Heritage Commission, Centre for Environmental Studies Occasional Paper 10, Centre for Environmental Studies, University of Tasmania.

Sands, J., 1903. *In Tasman's Land. Gleams and Dreams of the Great North-West*. The Emu Bay Railway Company Ltd.

Saunders, R. E., 1983. An evaluation of the Tasmanian Government's 1975 Draft Management Plan for the Southwest National Park. In: Gee, H. and Fenton, J., 1983. *The South West Book*. Third Edition. Collins, Sydney and the Australian Conservation Foundation, Melbourne, 254-255.

Shafer, E. L., Hamilton, J. F. and Shmidt, E. A., 1969. Natural landscape preference: a predictive model. *Journal of Leisure Resources*, 1, 1-19.

Sharland, M. S., 1972. *Tasmanian National Parks*. The Mercury, Hobart.

Sheail, J., 1997. "Guardianship" and the "Rural Workshop" - the first quarter century of U.K. experience in nature conservation. *Journal of Environmental Management*, 50, 429-443.

Smith, G., 1909. *A Naturalist in Tasmania*. Oxford.

Solbridge, O. T., vanEmden, H. M. and van Oordt, P. G. W. J., 1994. *Biodiversity and Global Change*. CAB International and IUBS, UK.

South-West Advisory Committee, 1978. *Report to the Minister for National Parks and Wildlife*. South-West Advisory Committee, Hobart.

South-West Advisory Committee, 1976. *Preliminary Report to the Minister for National Parks and Wildlife*. South-West Advisory Committee, Hobart.

Specht, R. L., Roe, E. M. and Broughton, V. H., 1974. Conservation of major plant communities in Australia and Papua New Guinea. *Australian Journal of Botany*. Supplementary Series, No. 7.

St John, E., 1974. Supplementary statement. In: The Parliament of the Commonwealth of Australia, 1974, *Final Report of the Lake Pedder Committee of Inquiry on the Flooding of Lake Pedder*. Parliamentary Paper No. 104. Government Printer of Australia, 181-196.

Stadel, C., Slupetzky, H. and Kremser, H., 1996. Nature conservation, traditional living space, or tourist attraction? The Hohe Tauern National Park, Austria. *Mountain Research and Development*, 16 (1), 1-16.

Stanton, J. P. and Morgan, M. G., 1977. *Project 'RAKES' - A Rapid Appraisal of Key and Endangered Sites, Report No. 1: The Rapid Selection and Appraisal of Key and Endangered Sites: The Queensland Case Study*. A Report to the Department of Environment, Housing and Community Development, School of Natural Resources, University of New England, Armidale, NSW.

Steinitz, C., 1990. Toward a sustainable landscape with high visual preference and high ecological integrity: the Loop Road in Acadia National Park, U.S.A. *Landscape and Urban Planning*, 19, 213-250.

Tasmania-Commonwealth Regional Forest Agreement, 1996. *Background Report Part A*. Tasmanian Public Land Use Commission.

Tasmania-Commonwealth Regional Forest Agreement, 1996. *Environment and Heritage Report Vol. 1*. Tasmanian Public Land Use Commission.

Tasmanian Conservation Trust, Forest Action Network, Wilderness Society and Australian Conservation Foundation, 1984. *The Douglas-Apsley National Park*. A proposal prepared and presented by the Australian Conservation Foundation, Tasmanian Conservation Trust, Wilderness Society and Forest Action Network.

Tasmanian Government and Australian Heritage Commission, 1981. *Nomination of Western Tasmania Wilderness National Parks by the Commonwealth of Australia for Inclusion in the World Heritage List*. Tasmanian Government and Australian Heritage Commission.

Tasmanian Government, (undated, c1940s). *A Hand Book of General Information*. John Vail, Government Printer.

Tasmanian Government, 1918. *Tasmania for the Tourist and Settler*. Government Printer, Tasmania.

Tasmanian Government, 1944. *A Booklet Containing a Brief Summary of the Resources and Educational and Social Activities of the State*. Premier's Department, Hobart.

Tasmanian Wilderness Society, 1981. *Douglas River National Park Proposal*. Wilderness Society, Tasmania.

Tasmanian Wilderness Society, 1978. *The Franklin: Tasmania's Last Wild River*. Tasmanian Wilderness Society, Hobart, Tasmania.

Tassell, M. and Wood, D., 1981. *Tasmanian Photographer. From the John Watt Beattie Collection*. The Macmillan Company of Australia Pty Ltd, Melbourne.

The Australian Conservation Foundation, the Wilderness Society and the Tasmanian Conservation Trust, 1988. *Western Tasmania Stage 2*

World Heritage. A draft nomination. Australian Conservation Foundation, Wilderness Society and Tasmanian Conservation Trust.

The Blockaders, 1983. *Franklin Blockade*. The Wilderness Society, Hobart.

The Hydro-Electric Commission, 1979. *Report on the Gordon River Power Development Stage Two*. A report to the Premier, Minister Administering the Hydro-Electric Commission Act, Tasmania.

The Wilderness Society, 1985. *Wilderness News*, 6 (8), 2.

The Wilderness Society, 1984. *Greenprint for a World-Class National Park. Proposal for a Western Tasmania National Park, Part 1*. The Wilderness Society, Melbourne.

The Wilderness Society, 1984. *The Proposal for a Western Tasmania National Park*. The Wilderness Society, Melbourne.

Thompson, P., 1984. *Bob Brown of the Franklin River*. George Allen and Unwin Australia Pty Ltd.

Thorne, J. F. and Chang-Shan Huang, 1991. Toward a landscape ecological aesthetic: methodologies for designers and planners. *Landscape and Urban Planning*, 21, 61-79.

Townsley, W. A., 1994. *Tasmania: Microcosm of the Federation or Vassal State, 1945-1983*. St David's Park Publishing, Hobart, Tasmania.

United Nations, 1994. *Operational Guidelines for the Implementation of the World Heritage Convention*. Intergovernmental Committee for the World Cultural and Natural Heritage. United Nations Educational, Scientific and Cultural Organisation, New York.

Weidenhofer, M., 1977. *Maria Island. A Tasmanian Eden*. Darlington Press, Victoria, Australia.

Weindorfer, G., 1910. Two botanists in the Cradle Mountains, Tasmania. *The Victorian Naturalist*, 28, 216-223.

Wessing, P., 1983. The Precipitous Bluff case. In: Gee, H. and Fenton, J., 1983. *The South West Book*. Third Edition. Collins, Sydney and the Australian Conservation Foundation, Melbourne, 263-265.

Williamson, D. N. and Calder, S. W., 1979. Visual resource management of Victoria's forests: a new concept for Australia. *Landscape Planning*, 19, 251-262.

Wilson, E. O., (Ed.), 1988. *Biodiversity*. National Academy Press, Washington, DC.

World Conservation Monitoring Centre and the IUCN Commission on National Parks and Protected Areas, 1994. *The United Nations List of National Parks and Protected Areas*. IUCN.

World Resources Institute (WRI), The World Conservation Union (IUCN) and United Nations Environment Programme (UNEP) in consultation with FAO and UNESCO, 1992. *Global Biodiversity Strategy*. WRI, IUCN, UNEP.

Yang, B.E. and Kaplan, R., 1990. The perception of landscape style: a cross-cultural comparison. *Landscape and Urban Planning*, 19, 251-262.

Zube, E.H., 1973. Rating everyday rural landscapes of the northeastern U.S. *Landscape Architecture*, 63, 92-97.

Zube, E.H., Brush, R.D. and Fabos, J.G., 1975. *Landscape Assessment, Values, Perceptions and Resources*. Dowden, Hutchinson and Ross, Stroudsburg, PA.